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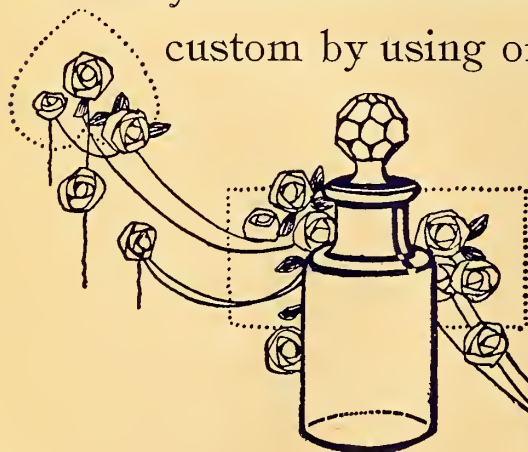
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The Index to Volume 6
in addition to

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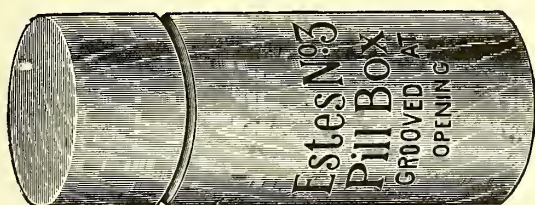
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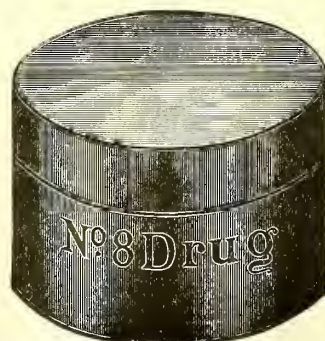
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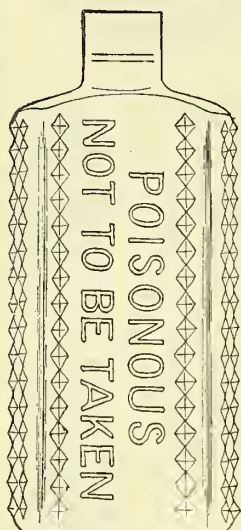
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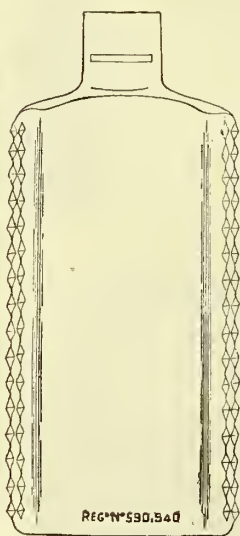
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CUT THIS OUT AND KEEP FOR REFERENCE.

INDEX TO ADVERTISEMENTS IN THIS ISSUE.

The Arabic numerals (1 to 46) in this index refer to Advertisements in front of the literary pages; the Advertisements following the literary pages are numbered in Roman numerals (i to xxxii); i

Page	Page	Page	Page
Aerators, Ltd. 30	Daggett & Ramsdell 10	Judson, D., & Son 18	Sangers' 17
Alcock's Plasters xxiii	Daisy, Ltd. 10	Kalamazoo Ledger Files 41	Sanitas Co., Ltd. Text 782
Allen & Hanburys, Ltd. Cover	Davies, Sons & Co., Ltd. 9	Kay Bros., Ltd. 29	Sankyo & Co. xi
Alliance Drug & Chemical Co. xvii	Degen, F. A. 29	Keane, T. xxx	Schliemann's Oil & Ceresine
Allison, B. Col. Supp.	Delvendahl & Kuntzel 12	Keating, T. xx	Co., Ltd. 25
Altrincham Rubber Co. xxvii	De St. Dalmas, A., & Co. xiii	Kershaw, H. E., Ltd. xxi	Scholl, C. Manfg. Co., Ltd. xxvi
"Apollo" Liquorice Juice xix	Duncan, Flockhart & Co. xiii	Kidston, W. M., & Co. 14	Schutze, F., & Co., Ltd. 24
Associated Bath Brick Manfrs. 40	Edwards' Harlene Co. 25	Lalor, Dr. x	Scrubb & Co. 22
Ayrton, Saunders & Co., Ltd. 21, 27	Eschbaum, F. A., Ltd. xxi	Le Brasseur Surgical Mfg. Co., Ltd. xiii	Singleton & Cole xxvii
Bailey, W. H., & Son, Ltd. xxiii	Estes, E. B., & Sons 3	Lescol Perfumery Co. 14	Slack, B. Col. Supp.
Baiss Bros. & Stevenson, Ltd. 43	Evans Sons Lescher & Webb, Ltd. 32, 33, v	Levermore, A., & Co., Ltd. xxvi	Smith, B. A., & Co. x
Baker, P. C. Col. Supp.	Ewen, Jas., & Son 25	Linton, Hubbard & Andrew 41	Smith, J. S. xxvii
Barclay & Sons, Ltd. 51	Exchange Column Col. Supp.	Lister, R. A., & Co., Ltd. 32	Smith, Lewis xvi
Barnett & Foster 36	Farmer, F., & Co. xxvi	Liverpool Lint Co. xxv	Snowdon & Co. xiii
Bash & Co. 16	Fassett & Johnson xxv	Lofthouse & Saltmer 38	Solport Bros., Ltd. 18
Beatson, Clark & Co., Ltd. xxiv	Faulding, F. H., & Co. xvi	Louthouse & Saltmer 28	South of England College 28
Beetham, M., & Son 19	Fentiman, A. G. xxvii	London & Colonial Manfg. Co. xxx	Southall Bros. & Barclay, Ltd. 13
Bell, J., Hills & Lucas, Ltd. 37	Fentiman, A. J., & Co. xxvi	"Lu-Ku" Co. xxvii	Spectacle Makers' Co. 28
Bengers' Food, Ltd. 46	Ferris & Co., Ltd. vi	McAdam & Tuckniss Col. Supp.	Standard Tablet & Pill Co., Ltd. Cover
Bennett, E., & Son, Ltd. 30	Field, C. W. 37	Macfarlan, J. F., & Co. ix	Stern Sonneborn Oil Co., Ltd. 18
Bennett, Sons & Shears, Ltd. 31	Fink, F., & Co. xxvi	MacKenzie Cure xix	Stevenson, H., & Sons xxvi
Berdoo & Fish Col. Supp.	Fletcher, Fletcher & Co., Ltd. Text 782	Macnair, A., & Co. xxvi	Stokes, F. J., Machine Co. 31
Berkefeld Filter Co., Ltd. 11	Fox & Co. (Liverpool), Ltd. xix	Mangold, C., & Co. xviii	Swoles, T. xxiv
Berliner, A. xxiii	Freeman's Chlorodyne, Ltd. xix	Maw, S., Son & Sons Cover	Sylvax Photo Works 27
Betts & Co., Ltd. 20	Gaasch, J. B. xxiv	May, Roberts & Co., Ltd. 24	Taylor, W. G. xxv
Bing, M. & A. C. xxvii	Galon Manfg. Co. xxvi	Melrose Drover, Ltd. 39	Theinhardt's Food Co. xxviii
Birmingham and Midland College of Pharmacy 28	Gardner xxvi	Merek, E. xi	Thompson & Capper 31
Blackie, R., Roberts & Co., Ltd. 19	Gardner, W., & Sons (Gloucester), Ltd. 32	Millar, A., & Co. 36	Thomlinson, T., & Son Col. Supp.
Boake, A. xxiii	Gardwaite, H. xxviii	Millard Bros., Ltd. xxxi	Thornbridge & Wright xix
Bowling & Son xxvi	Garthwood's Exors. xv	Mitchell, N. W., & Sons, Ltd. 20	Turtle Cup (1911), Ltd. 39
Braithwaite, H., & Co., Ltd. 30	Gimber, W., & Son xxv	Moller, Peter, Ltd. xiii	Tutti-Frutti Sen-Sen Co., Ltd. xviii
Brauner, L. xi	Glasgow School 28	Newball & Mason 36	Tyre, J., & Son xxiii
Brett & Co. Col. Supp.	Grant, D. xxxi	Nichols' Chemical Co., Ltd. vi	Tyrer, T., & Co., Ltd. xiii
Brett-Myers Co. 39	Griffin, J. J., & Sons, Ltd. 31	North of England Chamols Co. xxviii	Ucal 40
British Diamalt Co., Ltd. xvi	Gualter, T., & Co. 38	Northern College 26	Urellac Syndicate xviii
British Optical Institute, Ltd. 29	Huest, E. C. xxvii	Oakey, J., & Son, Ltd. xxviii	Valda Pastilles xxxii
Brown & Son 32	Harker, C. R., Staggs & Morgan, Ltd. 25	Odol Chemical Works i	Van Abbott, G., & Sons xxvi
Brnner, Mond & Co., Ltd. ii	Harvey & Co., Ltd. xx	Oppenheimer, Son & Co., Ltd. 42	Van Horn & Sawtell xxvii
Buchweitz, Bernard 40	Hatriek, J. L., & Co., Ltd. xxiv	Orridge & Co. Col. Supp.	Van Oppen Ross & Co. 25
Burge, Warren & Ridgley, Ltd. xxiii	Haynes, G., & Co. xvi	Paragon Press Co. xxx	Varaldi, F. xii
Burgess, E. xiv	Herpicide, The Co. 22	Paragon Press Co., & Sons xx	Vernon & Co., Ltd. xxii
Burroughs, J., Ltd. Text 782	Hewlett, C. J., & Son, Ltd. iv	Pettifer, Stephen, & Sons xx	Vibert, F. 16
Burroughs Wellcome & Co. 45	Hoffmann-La Roche, Ltd. xiii	Pharmazeutische Industrie Gesellschaft xxvii	Vinolia Co., Ltd. 20
Bush, H. W., & Co., Ltd. 26	Horlick's Malted Milk Co. 39	Phillips, Chas. H., Chemical Co. Text 782	Viscose Development Co., Ltd. 20
Bush, W. J., & Co., Ltd. 35	Horne & Sons xv	Pindar, J. W., & Co. xxvi	Vittel Water 38
Calvert, F. C., & Co., Ltd. 16	Hubbuck, T., & Son, Ltd. xvi	Piver, L. T. 12	Walker, J. Knox & Co. 22
Chameleon Oil Co., Ltd. xxvi	Hughes, E. Griffiths xxvi	"Poisonous" Poison Bottle 4	Wardale & Co., Ltd. xxvii
Charity, W., & Sons xvi	Huntley Boorne & Stevens, Ltd. xxx	Poppelreuter, W. Text 782	Warne, W., & Co., Ltd. xxviii
Chemical Works "Victoria" 37	Ichthyol-Gesellschaft xi	Potter & Clarke, Ltd. xii	Washington Chemical Co., Ltd. x
Chesebrough Manfg. Co. 46	Idris & Co., Ltd. 34	Raines & Co., Ltd. viii	Wattenbach, O. xxvi
Christy, T., & Co. 46, xxviii	Ilford Ltd. 1	Randall & Son, Ltd. 14	White, A., & Sons vi
Clark, Cicero S. xxvii	Indo Burma Co., Ltd. xviii	Ransom, W., & Son 24	Widenmann, Broicher & Co. xv
Clark's Syphon Stove Co., Ltd. 30	Isaacs, I., & Co. 27	Raphael's, Ltd. 29	Wileox, Jozeau & Co. Text 782
Clyde Press 40	Jewsbury & Brown Text 782	Reuter, R. J. 2	Wilkinson, S. W., & Co. 30
College of Preceptors 28	Jewes' Sanitary Compounds Co., Ltd. xxi	Resinol Chemical Co. iii	Williams, G. M., & Co. 38
Cook, G. xxxi	John Strange Winter 16	Richford, C. D. xxvii	Willows, Francis, Butler & Thompson, Ltd. iv
Corbyn, Stacey & Co., Ltd. x	Johnsen & Jorgensen, Ltd. xxix	Riley Bros., Ltd. xxiv	Wolf, F., & Sohn 19
Corry & Co., Ltd. xx	Johnson & Sons (Mfg. Chts.), Ltd. 27	Rogers & Co. 20	Wood, V. xxi
Crimson Cross Dispensary xxvii		Rueff, Julius xxviii	Wyleys, Ltd. vii
Crown Capsule Co. xxvii		Sacharin Corporation, Ltd. Cover	Zimmer & Co. xxv
Cullwick, H. E. xxvii			Zimmerman, C., & Co. xx

BUSINESS' GUIDE FOR GOODS ADVERTISED IN THE C. & D.

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Societe d'Electro-Chimie

CHLORIDE OF LIME

Brunner, Mond & Co., Ltd.
Electrolytic Alkali Co., Ltd.
United Alkali Co., Ltd.

CHLORODYNE

Davenport, J. T., Ltd.
Freeman's Chlorodyne, Ltd.

CHLOROFORM

Alliance Drug & Chem. Co.
Burrongs Wellcome & Co.
Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Morson, T., & Son
Smith, T. & H., Ltd.

CIGARS AND CIGARETTES

Hovenden, R., & Sons, Ltd.
Singleton & Cole, Ltd.

CITRIC ACID AND CITRATES

British Drug Houses, Ltd., The
Burgoyne, Burbidges & Co.
Howards & Sons, Ltd.
Morson, T., & Son
Sturge, John & E., Ltd.

CLINICAL THERMOMETERS

Burge, Warren & Ridgley, Ltd.
Maw, S., Son and Sons
Perken, Son & Co., Ltd.
Raphael's, Ltd.
Zeal, G. H.

CLOTH BALLS

O'Neil, Zetts & Co.
Senior, Alf., & Co.

COAL TAR SPECIALITIES

Wright, Layman & Umney, Ltd

COCOA

Cadbury Bros., Ltd.
Sandow, Eugen

COD LIVER OIL

British Drug Houses, Ltd., The
Charity, W., & Sons
Devold Feder
Jervell & Co.
Möller, Peter, Ltd.
Sparks, White & Co., Ltd.
Wright, Layman & Umney, Ltd.

COLLAPSIBLE TUBES

Betts & Co.
Brooks, Peel & Co.

COLOURS, BEVERAGE, &c.

Barnett & Foster
Boake Roberts & Co.
Stevenson & Howell, Ltd.

COLOURS, CHEMICAL

Williams Bros. & Co.

COMBS

Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, Francis & Sons, Ltd.

COMPLEXION LEAFLETS

Sangers

CONDENSERS

Bennett, Sons & Shears, Ltd.

CONFECTIONERY COLOURS

Williams Bros. & Co.

CONTINENTAL PROPS.

Wilcox, Jozeau & Co.

COPPERSMITHS

Braithwaite, H., & Co., Ltd.

Bennett, Sons & Shears, Ltd.

CORKS

Mitchell, N. W., & Sons, Ltd.
Swales, Thomas

Viscose Development Co., Ltd.

CORN EXTERMINATOR

Gardner

CORN PLASTERS

Solport Bros.

COUGH REMEDIES

Valda Pastilles

COUNTER ADJUNCTS

Evans Sons Lescher & Webb Ltd

COUNTER DISPLAY STANDS

London & Colonial Mfg. Co.

COUNTER SPECIALITIES

Allen & Hanburys, Ltd.
British Drug Houses, Ltd., The
Hewlett, C. J., & Sons
Lloyd, T. H., & Co., Ltd.
Lorimer Marshall
Southall Bros. & Barolay, Ltd.
Wright, Layman & Umney, Ltd.

COURT PLASTER

Pharm. Indust. Ges. (Offen-
bach)
Solport Bros.

CREAM OF TARTAR

British Drug Houses, Ltd., The

CREOSOTE

Bates Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.
Morson, T., & Son

CREPE BANDAGES

Burge, Warren & Ridgley, Ltd.
Gimber, W., & Son
Leslies, Ltd.
Norwich Crêpe Co. (1856), Ltd.
Wood, Vincent

CYANIDES

May & Baker, Ltd.

DAIRY SPECIALITIES

Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

DENTAL INSTRUMENTS

Hatrack, Jas. L., & Co., Ltd.

DENTAL MECHANICS

Cullwick H. E.
Fentiman, A. G.
Fentiman, A. J., & Co.
Garthwaite, H.
Halder, E. O.
Smith, J. S.
Wardale & Co.

DEVELOPERS

Express Developing Co.

DEXTRINE

Fink, F., & Co.

DIGESTIVE PRODUCTS

Armour & Co., Ltd.
Benger's Food, Ltd.
Fairchild Bros. & Foster
Parke, Davis & Co.
Squire & Sons
Widenmann, Broicher & Co.
Zimmermann, O., & Co.

DENTIFRICES

Bash & Co.
Beecham, T.
Bell (John), Hills & Lucas, Ltd
Blackie, Robert
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Euorly, Ltd.

Jewsbury & Brown
John Strange Winter
Knox, Walker, J., & Os.
Lambert Pharmacal Co.
McKesson & Robbins (Incorp.)
Mason Bros. & Chapman
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Riedel, J. D., & Co.
Sangers

Standard Tablet & Pill Co., Ltd.

Woolley, J., Sons & Co., Ltd.

DEVELOPERS (PHOTO)

Griffin, John J., & Sons, Ltd.
Johnson & Sons (Mfg. Chts.)

DIABETIC FOODS

Brusson Jeanne

Van Abbot, G., & Sons

DISINFECTANTS

Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.
Calvert, F. C., & Co.
Condy & Mitchell, Ltd.
Cook, E., & Co., Ltd.
Jeyes' Sanitary Compds., Ltd
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd

DOUCHES

Eschbaum, F. A., Ltd.
Maw, S., Son and Sons
Reuter, R. J.

DRUGGISTS' SUNDRIES

Ayrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Bush, H. W., & Co., Ltd.
Christy, T., & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb Ltd
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Poths, H., & Co.
Queloh, H. O., & Co.
Reuter, R. J.
Sangers
Schutze, F., & Co., Ltd.
Solport Bros.
Southall Bros. & Barolay, Ltd.
Swales, Thomas
Toogood, W., Ltd.
Wattenbach, O.
Woolley, J., Sons & Co., Ltd

DRUGS, CRUDE

Baiss Bros. & Stevenson, Ltd.
Brook, Parker & Co., Ltd.
Gathergood's Exor.
Goodall, Backhouse & Co.
Horne & Sons
Potter & Clarke, Ltd.
Ransom, W., & Son
Schmitt & Wildenhayn
Sparks, White & Co., Ltd.

DYES

Crawshaw, E., & Co.
Judson, Daniel & Son
Whitaker & Co. (Hat)

DYEWARES

Clemons, Marshall & Carbert

EAU DE COLOGNE

Farina, J. M.
Farina, J. M. (No. 4)
Farina, Johann Maria
Fickus, Courtenay & Co.
McCracken, J., & E.
Schutze F. & Co., Ltd.
Van Oppen Ross & Co.

EAU DE COLOGNE SOAP

Van Oppen Ross & Co.

EFFERVESCENT PREPS.

Bishop, Alfred, Ltd.
Bristol-Myers Co.
Guest, Thos. & Co.
Lloyd, T. Howard & Co.
Wright, Layman & Umney, Ltd.

ELASTIC HOSIERY

Ayrton, Saunders & Co. Ltd.
Burge, Warren & Ridgley, Ltd
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Surgical Hosiery Co. Ltd.
Wood, Vincent

EDUCATIONAL INSTITUTES

Bath & West of England College
Birmingham & Midland College
College of Preceptors
Glasgow School of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
North of England School
Northern College of Pharmacy
South of England College
Westminster College

ELASTIC GUM INSTS.

Mason Bros. & Chapman

ELECTRICAL NOVELTIES

Ward & Goldstone

EMBROCATIONS

Ayrton, Saunders & Co., Ltd.

EMERY AND CLOTH

Oakey, J., & Son, Ltd.

EMULSIFIERS

Bennett, Sons & Shears, Ltd.

EMULSIONS, C. L. O. & C.

Ayrton, Saunders & Co., Ltd.
Baiss Bros. & Stevenson, Ltd.
Burgeyne, Burdidges & Co.

ENEMAS

Burge, Warren & Ridgley, Ltd.
Maw, S. Son & Sons
Newbery, F., & Sons, Ltd.
Warne, W., & Co., Ltd.

EPSOM SALTS

Corbyn, Stacey & Co., Ltd.
Howards & Sons, Ltd.

ESSENCES, CONCRETE

Lautier Fils
Tombarel Frères

ESSENCES, SOL. AND FRUIT

Alliance Drug & Chem. Co.
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Hay, Wm., Ltd.
Lautier Fils
London Essence Co.
Newhall & Mason
Stevenson & Howell, Ltd.

ETHERS

Baies Bros. & Stevenson, Ltd.
Duncan, Flockhart & Co.
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
White, A., & Sons

EUCALYPTUS OIL

British Drug Houses, Ltd., The

EXTRACT OF HERBS

Newhall & Mason
Potter & Clarke, Ltd.

EXTRACTS (MEDICINAL)

Allen, Stafford & Sons, Ltd.
Evans Sons Lescher & Webb Ltd.
Gathergood's Exor.
Hawlett, C. J., & Son, Ltd.
Parke, Davis & Co.
Ransom, W., & Son

FACTORY SITES

North-Eastern Railway
Great Western Railway

FEEDING BOTTLES

Bush, Henry, W., & Co., Ltd.
Evans Sons Lescher & Webb Ltd.
Horlick's Malted Milk Co.
Hovenden, R., & Sons, Ltd.
Maw, S. Son & Sons
Reuter, B. J.
Sangers'

FILTERS

Berkefeld Filter Co., Ltd.

FOODS, INVALID,

Allen & Hanbury's, Ltd.
Bell (John), Hills & Lucas, Ltd.
Benger's Food, Ltd.
Brand & Co., Ltd.
Oor, Arthur H., & Co., Ltd.
Fairchild Bros. & Foster
Horlick's Malted Milk Co.
Leithin, Ltd.
"Lemco and Oxo"
Lofthouse & Saltmer
Menley & James, Ltd.
Natural Food Co., Ltd.
Neave, Josiah R., & Co.
Theinhardt's Food Co.
Turtle Cup (1911), Ltd.
Wander, A., Ltd.
Willows, Francis, B. & T.

FULLER'S EARTH

Mumford, G. S., & Sons

FUMIGATORS

Sanitas Co., Ltd.

FLESH GLOVES, STRAPS, & C.

Kester, R. J.
Solport Bros.

FLYCATCHERS

Alabastine Co. (British), Ltd.
Deansmore Manfg. Co.
Ford, Shapland & Co.
Kay Bros., Ltd.
Smith, J. H., & Co.
Tunbridge & Wright

FURNITURE POLISH

Elvee Company

GLAUBER'S SALT

Bramwell, E., & Son
Howards & Sons, Ltd.

GLYCERINE

Meffert, Hermann & Co.
Price's Patent Candle Co., Ltd.

GLYCERINE PLANT

Forshaw, E., & Sons, Ltd.

GLYCEROPHOSPHATES

Merck, E.
Pointet & Girard
Reitmeyer & Co.

GOLD PAINT

Judson, D., & Son

GRINDERS, DRUG, & C.

Allen, Stafford & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T.

GRIPE WATER

Woodward, W., Ltd.

GUMS

Fink, F., & Co.
Kidston, W. M., & Co.

HAIR DYES

Blackie, Robert
Harker, Stagg & Morgan, Ltd.
Osborne, Garret & Co.

HAIR PREPARATIONS

Anglo-Continental Trading Co.
Chesbrough Manfg. Co.
Edwards' "Harlene" Co.
Eggliss Manfg. Co.
Harker, Stagg & Morgan, Ltd.
Harrison, G. W.
Herpicide Co.
John Strange Winter
Odol Chemical Works
Osborne, Garret & Co.
Robare's Aureoline
Vibert, F.
Warner Oliver, Ltd.

HAT CLEANERS

Christy, Thos. & Co.

HAT DYES

Judson, D., & Son

HAT DYES

Whitaker & Co.

HAY FEVER REMEDY

Lu-Ka Co.

HEATING APPARATUS

Clark's Syphon Stove Co., Ltd.
Rajar, Ltd.
Richmond Gas Stove & Meter
HERBS
Brook, Parker & Co., Ltd.
Pannett & Neden
Potter & Clarke, Ltd.
Ransom, W., & Son

HOMOEOPATHIC MEDICINES

Ashton & Parsons, Ltd.
Keene & Ashwell, Ltd.

HOSPITAL FURNITURE

Hatrick, Jas. L., & Co., Ltd.

HOTELS

Esmond Hotel
Kingsley Hotel
Thackeray Hotel

HOT-WATER BOTTLES, & C.

Bailey, W. H., & Son
Berliet, Arthur
Burge, Warren & Ridgley, Ltd.
Galen Manfg. Co., Ltd.
Maw, S. Son & Sons
Schutze, F., & Co., Ltd.
Sheath Bros.
Sonthall Bros. & Barolay
Tompkins, James, Ltd.
Wood, Vincent

HYPHOPHOSPHITES

May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

HYDROGEN PEROXIDE

May & Baker, Ltd.
Sanitas Co., Ltd.
Tyrer, T., & Co., Ltd.

ICHTHYOL

Ichthyol Gesellschaft

INK POWDERS

Williams Bros & Co.

INSECT POWDER

Keating, Thomas

INHALERS

Burroughs Wellcome & Co.
Maw, S., Son & Sons
Sanitas Co., Ltd.

INSECTICIDES

Christy, Thos. & Co.
Tomlinson & Hayward, Ltd.

INSTEP SUPPORTS

Scholl, C. Manfg. Co.

IODINE RESUBLIMED

Howards & Sons, Ltd.
Huskisson, H. O., & Co.

IRISH MOSS

Cumming, J. W.
Salle, H., & Co.

ITROSYL

Fletcher, Fletcher & Co.

JARS AND POTS

Johnson & Jorgensen, Ltd.
Melin, O., & Co.
Kfeifer, O. A.
Reuter, R. J.
Stipendum Stopper Co.

JELLOIDS

Jelloid Co.

JUJUBES

Guest, Thos., & Co.
Potter & Clarke, Ltd.

JUNKET POWDER

Armour & Co., Ltd.

LAMPS

Block Light Co., Ltd.

LANOLINE

Burroughs Wellcome & Co.

LARD

Ewen, J., & Sons

LAVERDER OIL

Zimmermann, C., & Co.
Maddocks & Co.

LEATHER DYES

Williams, Bros. & Co.

LECITHIN

Salle, H., & Co.
Williams, G. M., & Co., Ltd.

LIME JUICE AND CORDIAL

Evans Sons Lescher & Webb Ltd.
Goodall, Backhouse & Co.
Idris & Co., Ltd.

LINSEED, CRUSHED, & C.

Mumford, G. S., & Sons

LINTS

Liverpool Lint Co.
Maw, S., Son & Sons
Robinson & Sons, Ltd.
Taylor, W. G.

LIQUORICE JUICE

Apollo
Evans Sons Lescher & Webb Ltd.
Horne & Sons
Jackson, E. E.
Mumford, G. S., & Sons
Solazzi
Whittaker, Arthur

LIQUORS, CONC. & C.

Fletcher, Fletcher, & Co.
Hewlett, C. J., & Son
Robinson, B., & Co.
Wyleys, Ltd.

LITHIA SALTS

British Drug Houses, Ltd., The
May & Baker, Ltd.

LOOFAHS

Internl. Sponge Importers, Ltd.
Solport Bros.

LOOSE-LEAF ACCOUNT

BOOKS
Morland & Impey, Ltd.

LOZENGES

Ayrton, Saunders & Co., Ltd.
Denoual, J., & Co.
Guest, Thos. & Co.
Jackson, E. E.
Potter & Clarke, Ltd.
Raines & Co.
Standard Tablet & Pill Co., Ltd.
Warrick Bros.

MACHINERY, PHARMACAL

Allen & Hanbury's, Ltd.
Bennett, E., & Son, Ltd.
Bennett, Sons & Shears, Ltd.
Braithwaite, H., & Co., Ltd.
Comet Chemical Co., Ltd.
Forshaw, E., & Son, Ltd.
Gardner, Wm., & Sons, Ltd.
Griffin, J. J., & Sons, Ltd.
Lyster, R. A., & Co., Ltd.
Pindar, J. W., & Co.
Stokes, F. J., Machine Co.
Wilkinson, S. W., & Co.

MAGNESIA AND ITS PREPS.

British Drug Houses, Ltd., The
Corbyn, Stacey & Co., Ltd.
Henry, T. & W.
Howards & Sons, Ltd.
May & Baker, Ltd.
Phillips, Chas. H., Chem. Co.
Washington Chemical Co., Ltd.

MARKING INK

Hickisson, A. (Bond's)
Williams Bros. & Co.

MALT EXTRACT & PREPS.

Boulton, J., & Co.
British Diamalt Co., Ltd.
British Drug Houses, Ltd., The
Burroughs Wellcome & Co.
Davies, Sons & Co.
Evans Sons Lescher & Webb,

METAL GOODS

Betts & Co., Ltd.

MEAT EXTRACTS

Armour & Co., Ltd.
Brand & Co., Ltd.
"Lemco and Oxo."
Tooth's Extract of Meat Co.
Turtle Cup (1911), Ltd.

MECHANICAL SHOW

FIGURES
Bush, Henry W., & Co., Ltd.

MENTHOL SNUFF

Christy, T., & Co.
Shirley Bros., Ltd.

MERCURIALS

Alliance Drug & Chem. Co.
Howards & Sons, Ltd.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

METHYLATED SPIRIT

Burrough, J., Ltd.
Macnair, A., & Co.
Preston's Liverpool Distillery.
Randall & Son, Ltd.

MICROSCOPES

Raphael's, Ltd.

MINERAL WATERS, SALTS

Apollinaris Co., Ltd.
Hughes, R. Griffiths.
Ingram & Royle, Ltd.
Vichy (State Springs)
Vittel

MIXERS AND SIFTERS

Comet Chemical Co., Ltd.
Gardner, Wm. & Sons (Glas-
cester), Ltd.

MUSTARD PLASTERS

Rueff, Julius

NURSES REQUISITES

Hatrick, Jas. L., & Co., Ltd.

OILS, MINERAL, FATTY,

Allen, Stafford & Sons, Ltd.
Price's Patent Candle Co.
Schliemann's Oil & Ceresine Co.
Stern Sonneborn Oil Co., Ltd.

OILS, ESSENTIAL

Allen, Stafford & Sons, Ltd.
Alliance Drug & Chemical Co.
Boake, A. Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Delvendahl & Kuntzel
Dodge & Olcott Co.
Evans Sons Lescher & Webb, Ltd.
Lautier Fils
London Essence Co.
Poppelreuter, W.
Ransom, W., & Son.
Schimmel & Co.
Stevenson & Howell, Ltd.
Tombarel Frères
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.

OINTMENT MILLS

Wilkinson, S. W., & Co.

OINTMENTS

Blackie, Robert
Burgess, E.
Calvert, F. O., & Co.
Cox, Arthur H., & Co.
Oldfield, Pattinson & Co.
Feat Products (Sphagnum), Ltd.
Smith, Manrice
Zimmermann, Chas. & Co.

OLIVE OIL

Goodall, Backhouse & Co.
Sparks, White & Co., Ltd.
Varaldi, F.

OPTICAL GOODS

Baird, John
Botwright & Gray
Darton, F., & Co.
Maw, S. Son & Sons
Nitsche & Gunther Opt. Co., Ltd.
Raphael's, Ltd.

OPTICAL TUITION

British Optical Institute, Ltd.
Spectacle Makers' Company

ORANGE WINE

Hobson, Joseph & Son
Melrose-Drover Co., Ltd.
Miller, A., & Co., Ltd.

OTTO OF ROSE (SYNTH.)

Crown Chem. Wks.
Wright, Layman & Umney, Ltd.

PALATINOIDS

Oppenheimer, Son & Co., Ltd.

PATENT AGENT

Barker, R. W.

PHOTO. POSTCARDS

Kajar Ltd.

PACKED GOODS

Allen & Hanburys, Ltd.
 Baliss Bros. & Stevenson, Ltd.
 Blackie, Robert
 Boulton, James & Co. (1909)
 Brook, Parker & Co., Ltd.
 Cox, Arthur H., & Co., Ltd.
 Christy, Thos., & Co.
 Davies, Sons & Co.
 Goodall, Backhouse & Co.
 Harker, C. R., Staggs & Morgan
 Knox Walker, J., & Co.
 Lloyd T., Howard, & Co.
 Lorimer Marshall
 May, Roberts & Co., Ltd.
 Newball & Mason
 Oldfield, Pattinson & Co.
 Potter & Clarke, Ltd.
 Sangers'
 Shirley Bros., Ltd.
 Standard Tablet & Pill Co., Ltd.

PASTILLES

Allen & Hanburys, Ltd.
 Aschoe, C. F., & Co.
 Burroughs Wellcome & Co.
 Denonal, J., & Co.
 Evans Sons Lescher & Webb, Ltd.
 Guest, Thos., & Co.
 Valda Pastilles
 Warrick Bros.

PEPPERMINT OIL

Bing, M. & A. C.

PERFUME MATERIALS

Bush, W. J., & Co. Ltd.
 Delvendahl & Kuntzel
 Horner & Sons
 Lautier Fils
 Naef, M., & Co., Snocors.
 Sobimmel & Co.
 Tombarel freres
 Valardi, F.
 Wright, Layman & Umney, Ltd.
 Zimmermann, C. & Co.

PERFUMES

Allen & Hanburys, Ltd.
 Atkinson, J. & E., Ltd.
 Baliss Bros. & Stevenson, Ltd.
 Barclay & Sons, Ltd.
 Bronnley, H., & Co., Ltd.
 Bush, W. J., & Co., Ltd.
 Christy, T., & Co.
 Claber, S., & Co., Ltd.
 Erasmo Co., Ltd.
 Evans Sons Lescher & Webb, Ltd.
 Hallfor Co.
 Hewlett, C. J., & Son
 Hovenden, R., & Sons, Ltd.
 Jago & Jerome
 John Strange Winter
 Lesool Perfumery Co.
 McCracken, J. & R.
 Newbery, F., & Sons, Ltd.
 Piver, L. T.
 Queloh, H. C., & Co.
 Rivers, Hill & Co., Ltd.
 Sontball Bros. & Barclay Ltd.
 Vinolia Co.
 Warrick Bros.
 West, T., & Son
 Wolff, F., & Sohn

PESSARIES (SOLUBLE)

Burge, Warren & Ridgley, Ltd.
 Rendell, W. J.

PETROLEUM JELLY

Chesebrough Mfg. Co.
 Schliemann's Oil & Ceresine Co.
 Stern, Sonneborn Oil Co., Ltd.

PHOTO. CHEMICALS

Boehringer, C. F., & Soehne
 Griffin, John J., & Sons, Ltd.
 Johnson & Sons (Mfg. Chts.), Ltd.
 Reitmeyer & Co.

PHOTO. GOODS

Barelay & Sons, Ltd.
 Burroughs Wellcome & Co.
 Evans Sons Lescher & Webb, Ltd.
 Express Developing Co.
 Ilford, Ltd.
 Kent, G. B., & Sons, Ltd.
 Lennon, Ltd.
 May, Roberts, & Co., Ltd.
 Newbery, F., & Sons, Ltd.
 Oppenheimer, Son & Co., Ltd.
 Sylvax Photo Works

PHOTO. RUBBER GOODS, & C

Altrincham Rubber Co.

PLASTIC MODELS

Knox, Walker (J.) & Co.

POSTAL BOXES

Robinson & Sons, Ltd.

PLASTERS

Alcock Mfg. Co.
 Berliner, Arthur
 Dalmas, A. de St., & Co.
 Leslies, Ltd.

PILL MAKERS

Allen & Hanburys, Ltd.
 Aschoe, C. F., & Co.
 British Drug Houses, Ltd., The
 Cox, A. H., & Co., Ltd.
 Davies, Sons & Co.
 Howards & Sons, Ltd.
 Lloyd, T. Howard, & Co.
 Parke, Davis & Co.
 Standard Tablet & Pill Co., Ltd.
 Wand Mfg. Co.
 Wyleys, Ltd.

PLEATED PAPER

Darter, Wilkinson & Co.
 Smith Bros. & Co.

POLISHES (VARIOUS)

Bradley & Bourdas
 Oakley, J., & Sons, Ltd.

POSTERS

Ford, Shapland & Co.

PRINTERS

Arden Press
 Ford, Shapland & Co.
 Harrison & Waide
 Suttley & Silverlock, Ltd.
 Townsend, J., & Sons

PRINTING PRESSES

Paragon Press Co.

PROPRIETARY ARTICLES

Ashton & Parsons, Ltd.
 Barclay & Sons, Ltd.
 Battey & Watts
 Bechoam, T.
 Bow's Linament, Ltd.
 Box, W. H.
 British Drug Houses, Ltd., The
 Burgess, E.
 Chameleon Oil Co., Ltd.
 Christy, T., & Co.
 Clark, Cicero S.
 Crimson Cross Dispensary
 Daisy, Ltd.
 Danys Virus, Ltd.
 Davenport, J. T., Ltd.
 Edwards, W., & Son
 Evans Sons Lescher & Webb, Ltd.
 Faulding, F. H., & Co.
 Fellows' Med. Mfg. Co.
 Fennings, Alfred
 Ferris & Co.
 Fox & Co. (Liverpool), Ltd.
 Freeman's Chlorodyne, Ltd.
 Fulford, C. E., Ltd.
 Goodall, Backhouse & Co.
 Harrison, Geo. W.
 Henry, T. & W.
 Hughes, E. Griffiths
 Ichthyol Gesellschaft
 Kay Bros., Ltd.
 Kutnow, S., & Co., Ltd.
 Lator's Phosphodyne
 Leoithin, Ltd.
 "Lemco" and "Oxo"
 Lofthouse & Saltmer
 "Lu-Kn" Co.
 Mackenzie's Cure Depot
 Martindale, W.
 May, Roberts & Co., Ltd.
 Newbery, F., & Sons, Ltd.
 Odol Chemical Works
 Oppenheimer, Son & Co., Ltd.
 Owenbridge, W. T., Ltd.
 Phillips, Chas. H., Chem. Co.
 Resinol Chemical Co.
 Richter, C., & Co.
 Riedel, J. D., Co.
 Sangers'
 Sebbimmel & Co.
 Scott & Bowne, Ltd.
 Smith, Lewis
 Squire & Sons
 Standard Tablet & Pill Co., Ltd.
 Tefras Speciality Co., Ltd.
 Thompson & Capper
 Tanbridge & Wright
 Ucal Works
 Urillao Syndicate
 Valda Pastilles
 Wander, A., Ltd.
 Warner Oliver, Ltd.
 Warrick Brothers
 Wilcox, Jozeau & Co.
 Williams, G. M., & Co., Ltd.
 Wright, Layman & Umney, Ltd.
 Zimmermann, C., & Co.

PUFFS

Solport Bros.

PULVILLÆ

Warrick Bros.

PULVERETTES

Oppenheimer, Son & Co.

PUMPS

Berkfield Filter Co., Ltd.

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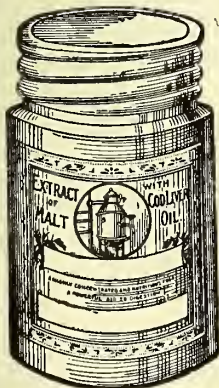
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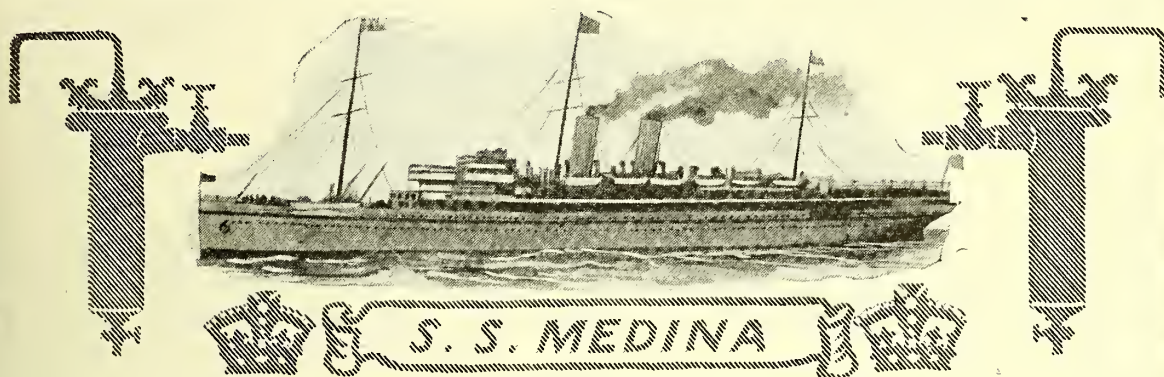
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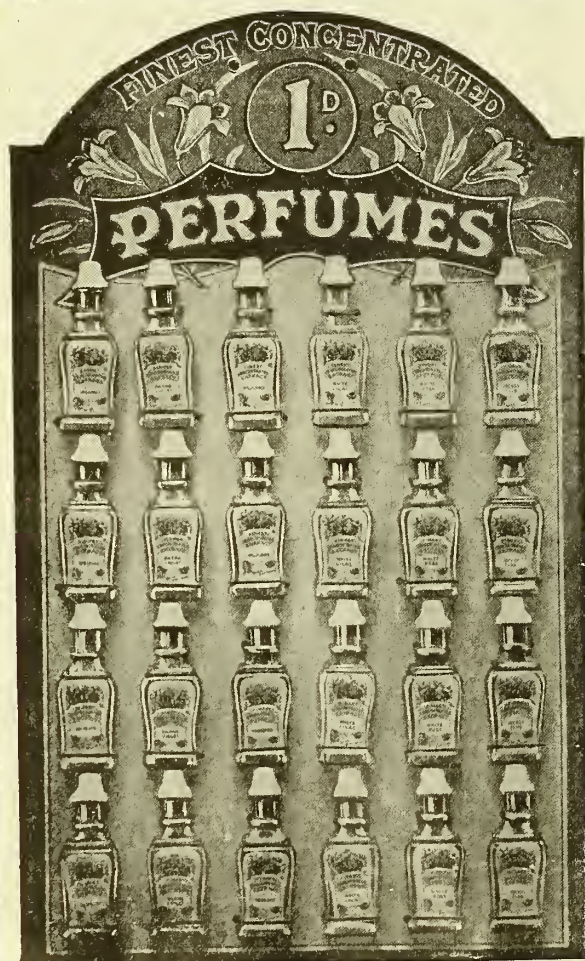
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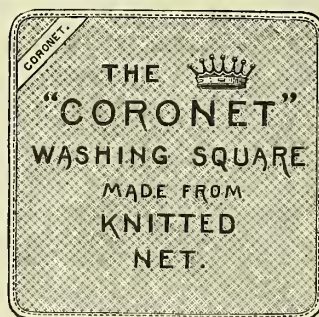
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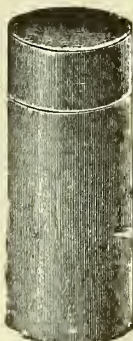
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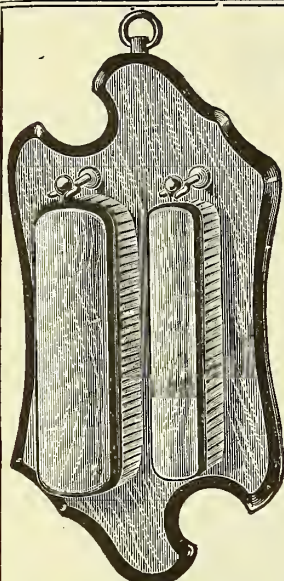
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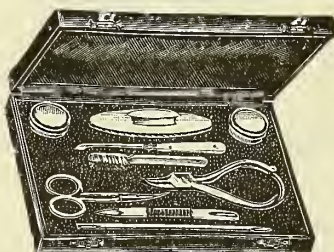
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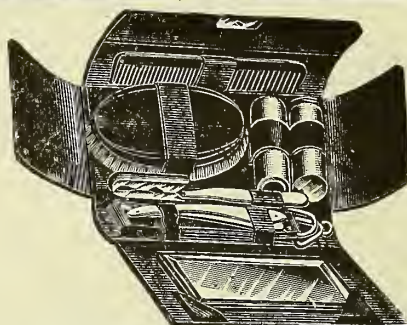
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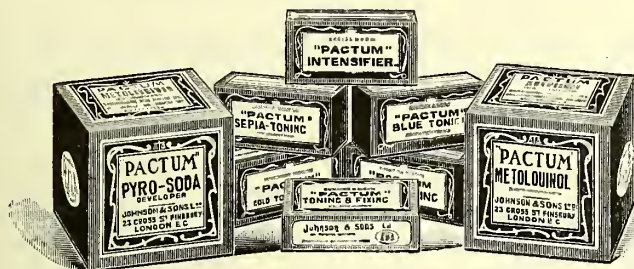


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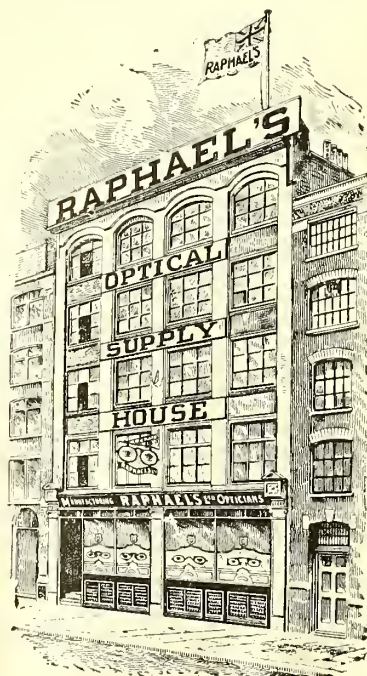
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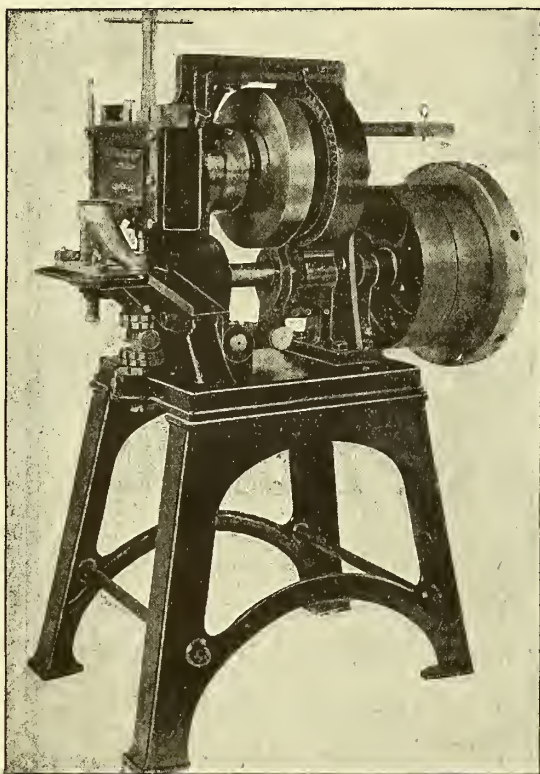
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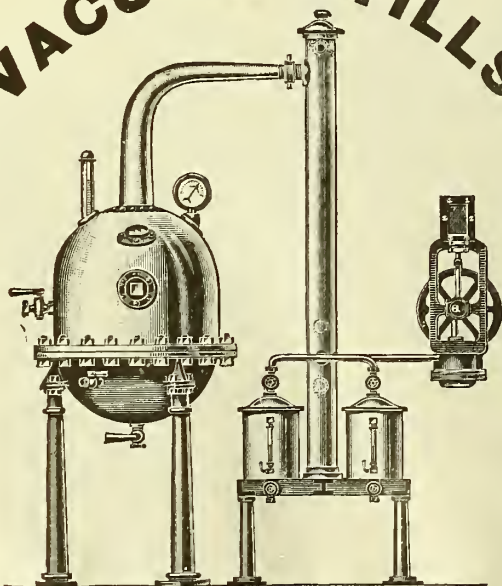
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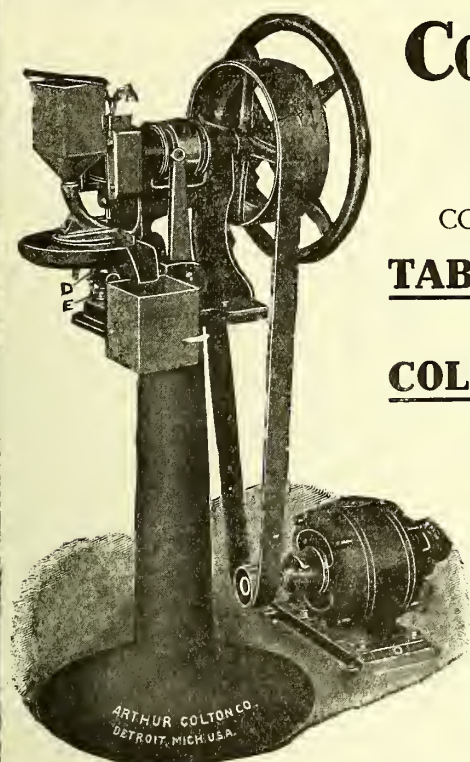
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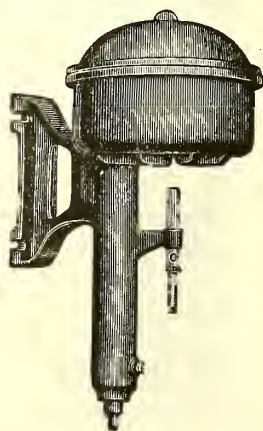
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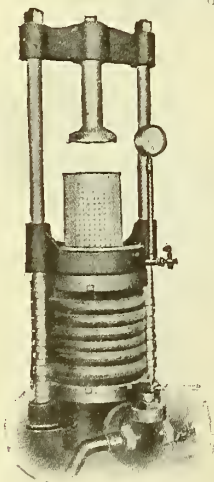
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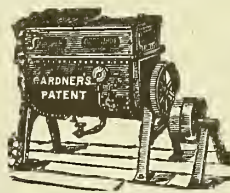
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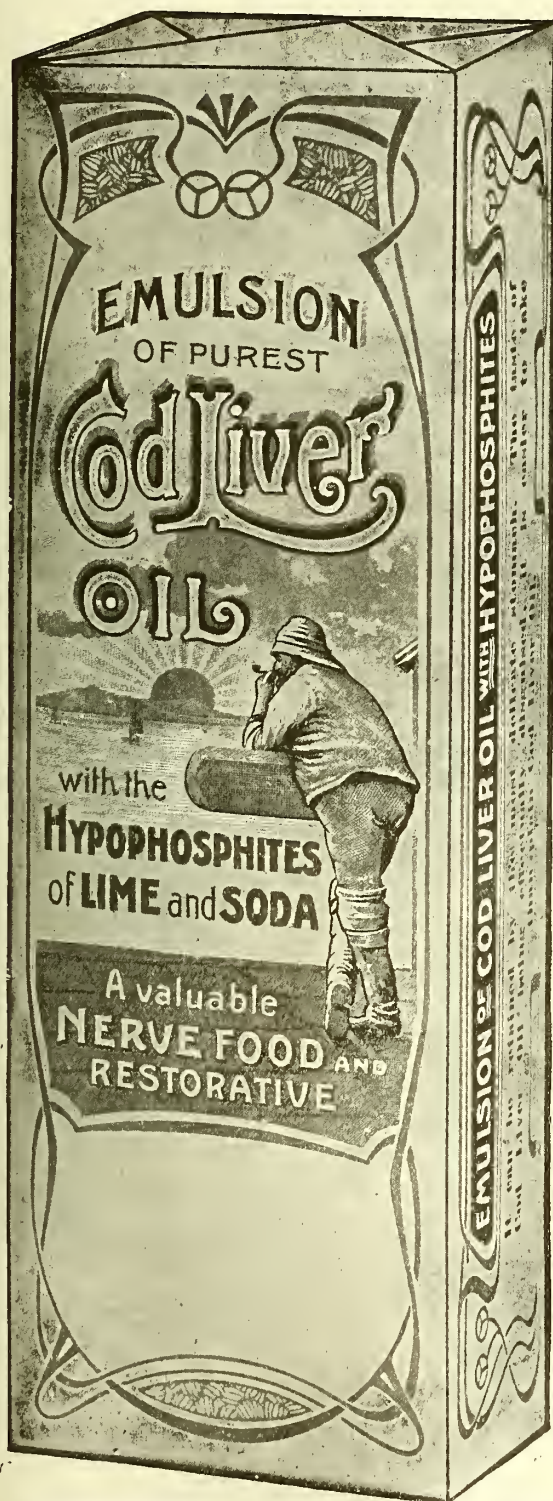
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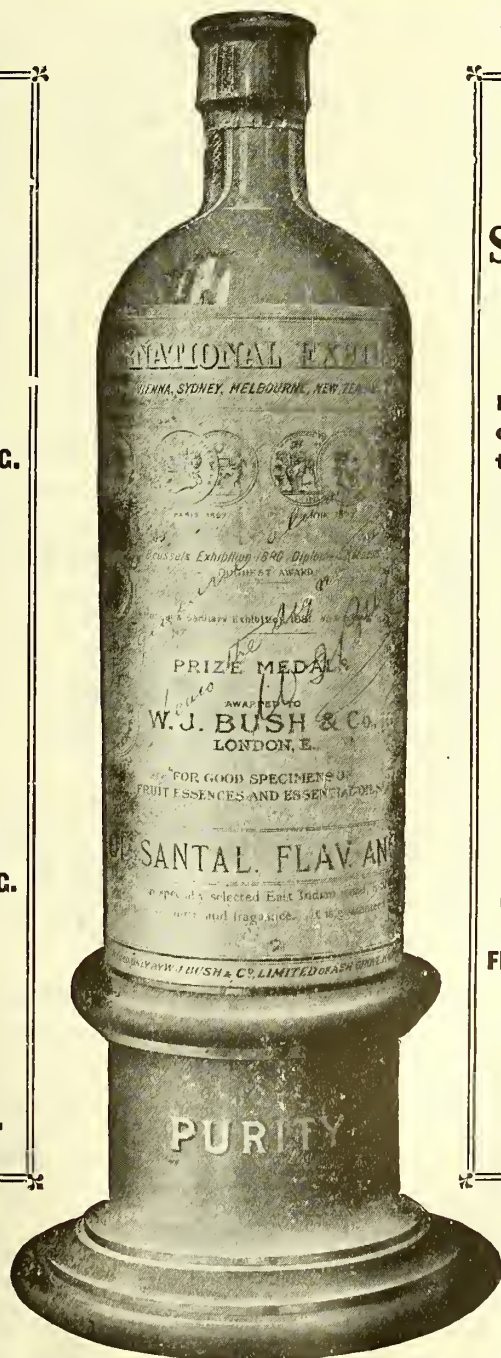
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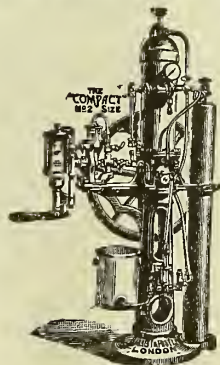
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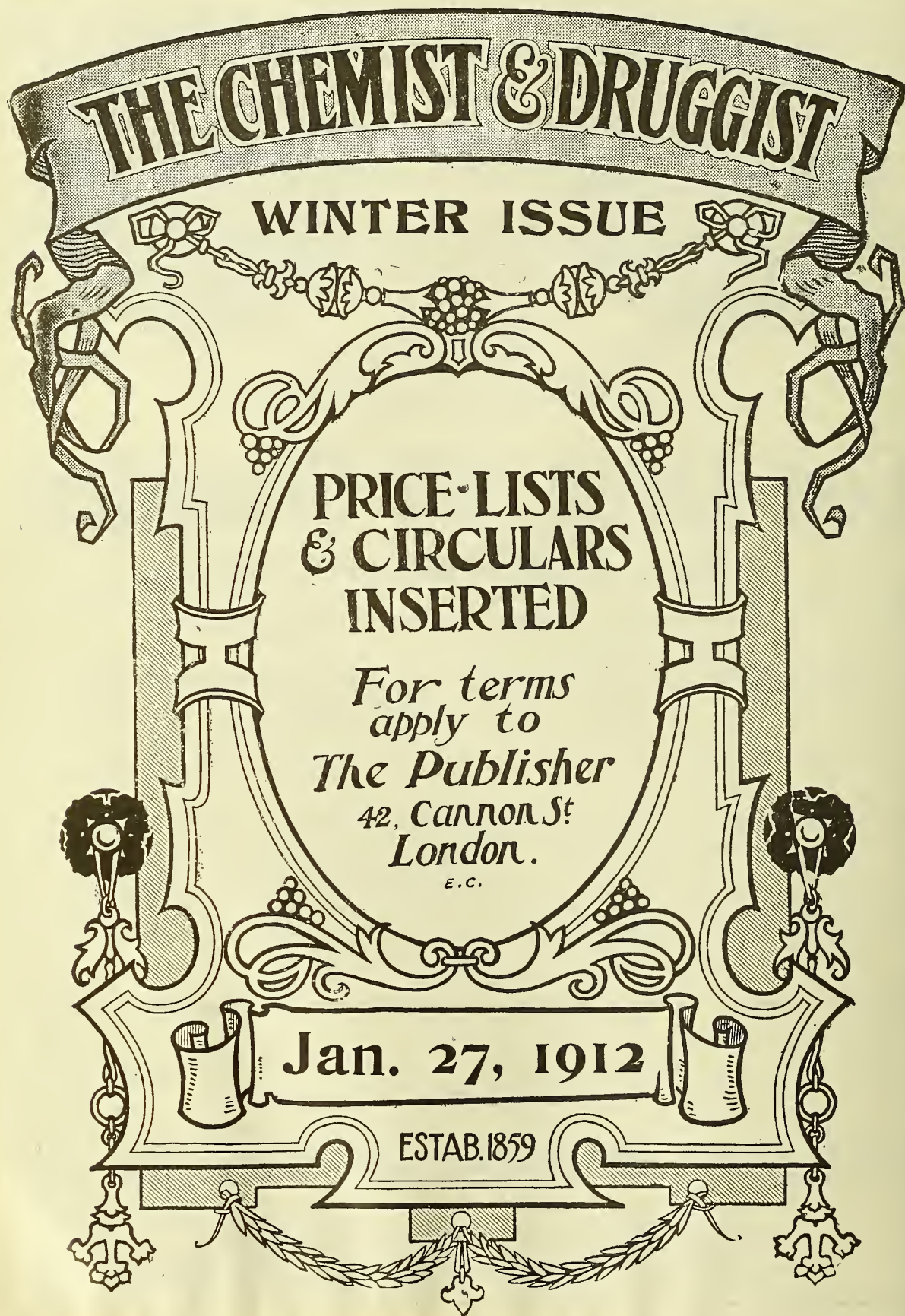
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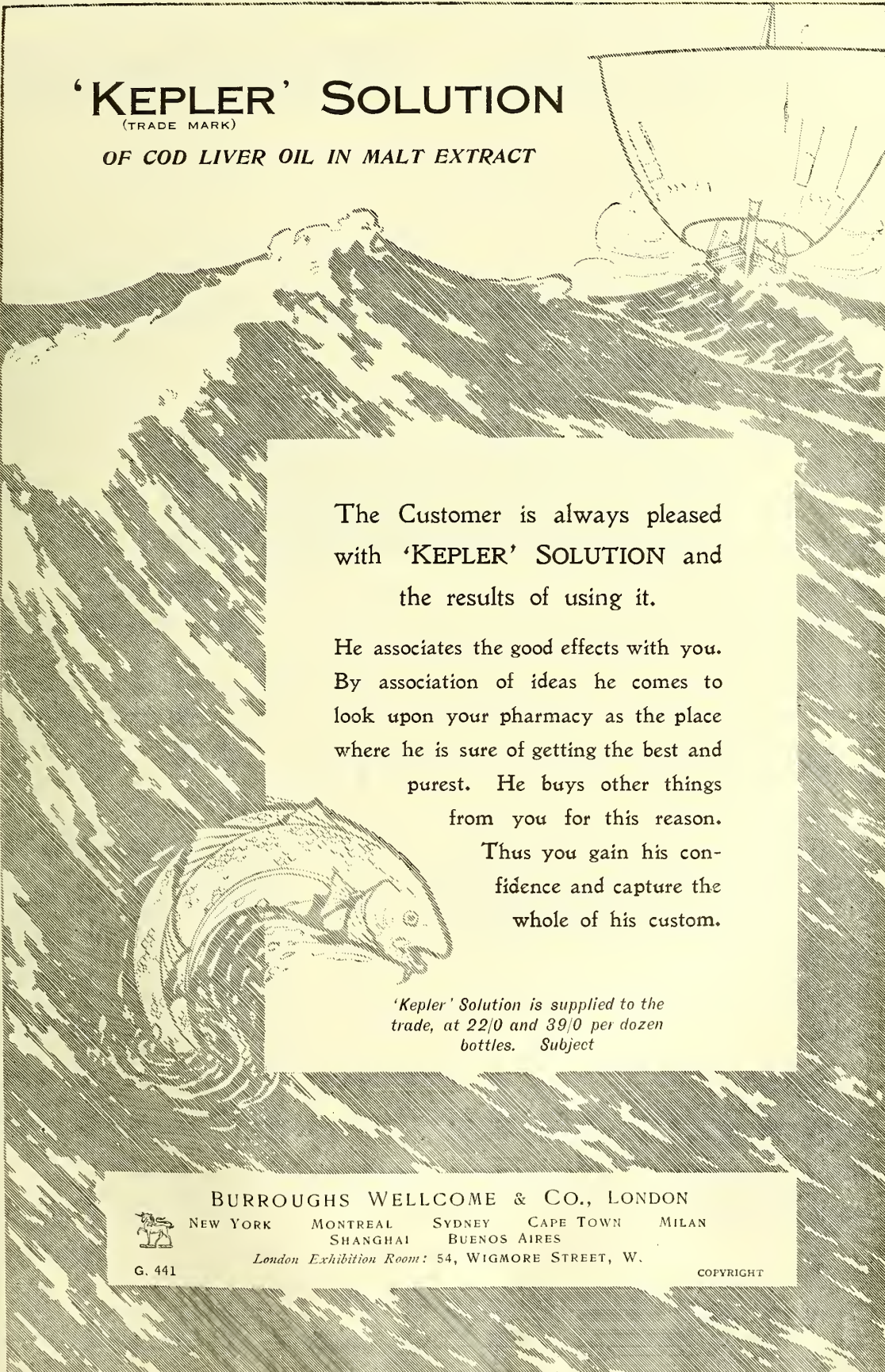
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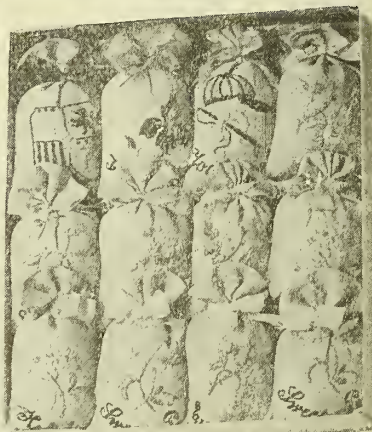


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CONTENTS: Vol. LXXIX., No. 22 (Series No. 1661.)

[The folios in this List and in the Summary are those at the top of the pages, but references in the Text are to the index folios at the bottom of the pages.]

	PAGE		PAGE
A New Oil	67	New Companies	57
Bankruptcies	56	Observations and Reflec-	
Births	58	tions	63
Business Changes	49	Personalities	53
Chemical Society	70	Poisonings	Col. Supp.
Citronella Oil	67	Poisons and Pharmacy	
Coming Events... Col. Supp.		Act, 1908—Order in	
Company News	57	Council	69
Corner for Students	48	Retrospect	80
Correspondence	78	Reviews	68
Deaths	58	Scientific Progress	62
Deeds of Arrangement ...	56	Scottish News	52
Editorial Articles:		Social Gatherings Col. Supp.	
Medical Revolt	65	South African News	
Excise Drugs	66	Col. Supp.	
Notes	66	Trade-marks Applied for	
English News	50	Col. Supp.	
French News	53	Trade Notes	59
Gazette	57	Trade Report	75
Information Department	62	Westminster Wisdom ...	60
Irish News	53	Wills	58
Legal Reports	54	Winter Session	71

TO SUBSCRIBERS ABROAD.

COPIES of *The Chemists' and Druggists' Diary*, 1912, are despatched this week to all our subscribers in Australia, New Zealand, and adjacent British Possessions. We call subscribers' attention to the fact that each copy contains a coupon postcard, which should be filled up and returned to us as soon as possible.

Next week we are despatching other consignments of the *Diaries*. These will go to chemists in South Africa and other parts of the African Continent, to India, Ceylon, Straits Settlements, Siam, China, and Japan.

Particulars as to despatch of *Diaries* to other parts abroad which are nearer the British Isles will be given later. We would remind subscribers at home whose subscriptions expire with this issue that they should renew at once, in order that they may not miss the *Diary*. It contains several thousand formulas which have not been published before in this form.

Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

The latest observations on the administration of salvarsan are mentioned on p. 67.

The criticism by Messrs. Schimmel & Co. of English work on citronella oil is further replied to by Mr. Umney in an article quoted on p. 67.

What should a dispenser do when in a prescription a four-minim dose of laudanum is ordered for a child of twelve months? is the question put by Dr. McWalter on p. 78.

The Privy Council has issued new regulations under the Poisons and Pharmacy Act, 1908. These are to meet the case of corporate bodies and of assistants who require licences for the sale of agricultural or horticultural poisons (p. 69).

Dr. Salway, of the Wellcome Chemical Research Laboratories, has commenced a research on Calabar beans. He finds that physostigmine contained in the bean melts at 86°, the commercial alkaloid melts at 105°, so that it is di-morphous. He has isolated a new alkaloid, physosvenine, but found no eseridine. An account of his Chemical Society communication is given on p. 70.

Parliamentary.

The Shops Bill is to be enacted this Session (p. 61).

Our Parliamentary representative has interviewed Mr. Arthur Lynch, M.P., M.R.C.S., L.R.C.P., one of the prime movers for an inquiry into the sale of "patent medicines" (pp. 61 and 67).

The National Insurance Bill got through the Committee stage on Tuesday evening. The local pharmaceutical committee proposal was not considered. Notice of additions for the Report stage, among them provision for apothecaries' assistants, and one giving effect to the Huxford deputation ideas, are mentioned (p. 60). Medical practitioners, led by the British Medical Association, are in revolt, among their demands being amendment of Clause 14 (5), so as to allow them as well as chemists to dispense. For full particulars see pp. 64-66.

Legal and General.

The death of Dr. Eugen de Haën, the Hanover chemical technologist, is reported (p. 58).

Three sulphates (Fe, Cu, and Zn) were the last mixture of salts given to our students. See pp. 48-49.

Mr. Robert McAdam, of the Glasgow Apothecaries' Co., was entertained to a jubilee dinner last Friday (p. 52).

Glasgow chemists have discussed dispensing charges under the National Insurance Bill. We give a report of it on p. 74.

Our Company News contains particulars of two companies which are in liquidation, with a list of creditors in one case (p. 57).

Liverpool chemists have met and discussed the desirability of making the 'real Chemists' Association (the oldest in England) more popular (p. 50 and p. 73).

Mr. W. E. Hill presided at the annual meeting of the Lincoln Chemists' Association on November 16. A report of it comes to us after all the succeeding pages have been made up.

In an action at King's Heath under the Medicine Stamp Act, 1812, the Revenue representative protested against the use by chemists of a strip label closely resembling the revenue medicine stamp. The Magistrates fined the defendant, a pharmaceutical chemist (p. 55).

A Longton chemist, prosecuted for selling plumbiferous citric acid, pleaded warranty, but the warrantors proved to the Bench that the acid which they supplied contained less lead than in that sold. The Magistrates set aside the warranty, and convicted (p. 55).

Trade and Market Matters.

Extremely quiet conditions have prevailed in the markets, with the exception of heavy chemicals, which are brisk on export account, but quiet in the home trade. Alterations in values are few, and include higher prices for all citrates, benzols, isinglass, copper sulphate, pepper, and gamboge. Buchu, shellac (auction), quicksilver (seconds), milk-sugar, cod-liver oil, star-anise oil are all more or less easier. Quinine is firm (p. 75).

CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus: "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

QUALITATIVE ANALYSIS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Tuesday, November 28, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, December 9. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The analysis announced above forms the second exercise in

THE ANALYTICAL TOURNAMENT

for the current winter session. The usual monthly first and second prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, which fact must be attested on their reports. Students who adopt a *nom de plume* must adhere to it throughout the tournament.

Report on November Analytical Exercise.

The powder distributed to students on October 25 contained 1 part by weight of cupric sulphate, 1 part of ferrous sulphate, and 3 parts of zinc sulphate. The calculated composition of such a mixture is:

Cu	...	...	...	...	5.1
Fe	...	...	...	...	4.0
Zn	...	...	...	...	13.6
SO ₄	...	...	...	...	34.7
H ₂ O	...	...	...	...	42.6
					100.0

The powder also contained, as impurities, manganese to the extent of about 0.2 per cent. and a minute trace of a chloride.

Samples of the powder were distributed to fifty-two students, and thirty-three reports were sent in for examination. Copper and the sulphuric-acid radical were detected by all our correspondents. Eight students missed the zinc and one altogether failed to detect iron, while two reported the latter as a ferric compound only. In six reports no mention is made of the evolution of water when the powder was heated in a dry test-tube. Only three students detected and correctly reported manganese as present in very small proportion; but, on the other hand, no fewer than five reported it, incorrectly, as a main constituent of the powder, apparently assuming that the precipitate of zinc sulphide consisted of manganous sulphide and either omitting to test the matter altogether or failing to apply any sufficient test. Twenty-four students did not detect the presence of manganese at all.

Although the fact that the powder was prepared exclusively from sulphates rendered the examination for acid radicals a comparatively simple matter, and although the metals which were main constituents were all present in quantity which made their detection easy, the standard of marks attained (except by the section of qualified students) is somewhat lower than usual. We note that the marks attained by qualified students are in several cases equal to or in excess of those awarded to the unqualified

students who are at the top of the list in their section, and while it might be expected that the place taken by qualified students would, as a rule, be higher than that taken by those who are unqualified, this is seldom so conspicuously the case as it is in the present instance. The failure to attain a higher position was due in most cases to want of success in dealing with the small quantity of manganese mentioned above in the statistics of failures. In consequence of oxidation effects due to atmospheric oxygen (which were dealt with at some length in the summer articles on Oxidation and Reduction), the precipitated hydroxides of the iron group are liable to contain part of the manganese, when this is a constituent of the mixture under analysis, while part also usually passes into the filtrate. (See *C. & D.*, July 15, 1911, index folio 72, paragraph 2, a.) It is, therefore, necessary to examine both the precipitate and the filtrate for manganese. In the present analysis, on fusing a small portion of the iron-group precipitate in the loop of a platinum wire with sodium carbonate and potassium nitrate, we readily obtained a pale green bead which clearly revealed the presence of manganese in small quantity. Many of our correspondents omitted to try this test, while of those who applied it several reported that no green coloration was produced. It is possible that in some cases most of the manganese found its way into the filtrate, but if so, sufficiently careful examination of the latter should have led similarly to its detection.

It is well known that traces of manganese are liable to escape precipitation by means of ammonium sulphide and to pass into the filtrate which is subsequently to be examined for barium-group metals and for magnesium, and that when this occurs a reaction is often obtained with sodium or ammonium phosphate which appears to indicate the presence of traces of magnesium, whereas it is really due to the traces of manganese. The supposed traces of magnesium reported by several students seem to have been merely traces of manganese. It has been found possible to get rid of the last traces of manganese which may have escaped precipitation in this way, prior to testing for magnesium, by adding bromine water and excess of ammonia, and removing the precipitated hydroxy-peroxide by filtration.

A few reports bore evidence that the writers were not clear as to how and at what stage to test the state of oxidation of the iron. This ought, of course, to be done with portions of the original substance which have not been exposed to oxidising or reducing agencies, and with solutions in the preparation of which oxidation and reduction have been avoided.

Several correspondents fell into error when testing for acid radicals in consequence of their obtaining a precipitate in considerable quantity on adding silver nitrate to a nitric-acid solution. This precipitate was reported as silver chloride, whereas it consisted practically entirely of silver sulphate, and it was produced in cases where the solutions under examination were too concentrated as regards the sulphuric-acid radical. Since silver sulphate requires almost 100 times its weight of cold water to dissolve it, care in employing dilute solutions is obviously necessary in order to avoid its precipitation in solutions known to contain sulphates. Some confusion also arose in a few cases through the precipitation of calcium sulphate on the addition of calcium chloride in the testing for acid radicals. Although calcium sulphate is less sparingly soluble in water than silver sulphate, the possibility of its being precipitated at this stage and mistaken for something else is one of those definite sources of error which students would do well to keep carefully and constantly before them.

PRIZES.

The First Prize for the best analysis has been awarded to

J. PUDDERHA, 84 Far Gosford Street, Coventry.

The Second Prize has been awarded to
GEORGE F. SHAW, 111 Clifford Street, Aston, Birmingham.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR ANALYSES.

1. Correspondents who are unqualified :

J. Puddepha (1st prize)	93	R. L. B. ...	80
Geo. F. Shaw (2nd prize)	91	Tolut ...	79
L'Espérance ...	90	Stannum ...	78
Elad ...	89	C. G. O. ...	76
P. R. ...	89	Alkyl ...	73
Stokville ...	89	Heroin ...	72
Phenol ...	88	Student ...	71
Phœnix ...	87	Atropin ...	67
S. J. D. ...	87	Rojam ...	67
Nil Desperandum ...	84	D. B. ...	59
En Avant ...	83	Rego ...	56
Nihil ...	83	G. A. S. Leeds ...	38
Chorlton ...	82	Curious ...	—

2. Correspondents who are qualified :

Club Moss ...	95	Oxo ...	91
Cobalt ...	91	Spes ...	86
Liebig ...	93	Xerxes ...	86
Nitraz ...	98		

TO CORRESPONDENTS.

L'ESPÉRANCE.—We were not able to confirm the presence of all the traces you report. The supposed aluminium hydroxide was probably silicic acid derived from the sodium hydroxide, and the traces of calcium and magnesium may have come from tap-water.

ELAD.—You should have ascertained whether the iron was present in the ferrous or ferric condition; or if partly the one and partly the other.

P. R.—It was superfluous to add ferrous sulphate as a test for ferro- or ferricyanides to the sodium-carbonate extract from a substance which contained ferrous sulphate and was entirely soluble in water. The picric-acid test cannot be relied upon to reveal the presence of traces of potassium.

STOKVILLE.—We failed to obtain any evidence of the presence of traces of arsenium.

PHENOL.—While the solubility of cupric sulphide in ammonium sulphide explained the precipitation of the former substance when the ammonium-sulphide extract from the hydrogen-sulphide precipitate was acidified, you omitted to obtain any evidence that the precipitate was unmixt with sulphides of the arsenium group, but simply ignored the possible presence of the latter. Read the last sentence of the reply to "P. R."

PHŒNIX.—We fancy the green flame you observed when heating the powder in a dry tube was due either to particles of the powder adhering to the outside of the tube or to the fact that the tube was cracked. We are surprised that you did not observe the greenish colour of the mass obtained on fusing the iron-group precipitate with sodium carbonate and potassium nitrate: it was pale, but distinct. The powder did not contain a nitrate. Do not write equations in your report: these are not requisite to elucidate analytical operations.

S. J. D.—You omit to report any test, made at the proper stage, for potassium or sodium.

NIL DESPERANDUM.—Since the hydrogen-sulphide precipitate did not dissolve completely in solution of potassium hydroxide, you appear to have omitted to test whether or not any part of it dissolved, whereby you failed to establish either the presence or the absence of the arsenium group. Apparently you also omitted to test for bismuth.

EN AVANT.—Your preliminary examination of the powder was too slender. It was useless to examine the iron-group precipitate to ascertain whether the iron was in the ferrous or the ferric state, since this gave no clue to the state in the original powder. If you had followed the instructions printed with the announcement of the analysis, you would not have ceased to test for metallic radicals after you had detected copper, iron, and zinc. Read the last sentence of the reply immediately preceding.

NHIL.—Seeing that you applied special tests regarding the point, we cannot understand how you reached the conclusion that the iron was present in the original powder in the ferric state only.

CHORLTON.—Since you obtained a green iron-group precipitate on adding ammonium chloride and ammonia, it seems likely that you had not previously added enough nitric acid to convert the whole of the ferrous into ferric salt. The powder did not contain lead or an arsenate.

R. L. B.—There is no evidence in your report that you tested for mercury, lead, bismuth, cadmium, antimony, tin, chromium, aluminium, or manganese.

TOLUT.—The non-detection of garlic odour on heating the powder on charcoal in the reducing blowpipe flame would not establish the absence of arsenium. You do not prove the absence of numerous metals belonging to the copper, iron, and zinc groups.

STANNUM.—Your report is too sketchy in parts, and descriptions are omitted of various operations which you must have carried out in order to obtain the results you mention.

C. G. O.—The yellow residue which you supposed to be arsenious sulphide probably consisted of sulphur derived from yellow ammonium sulphide. Read the second sentence of the reply to "En Avant" and the last sentence of the reply to "Tolut."

STUDENT.—You omitted to give any account of the examination of the solution which might contain the metals of the arsenium group. The white precipitate, insoluble in dilute nitric acid, which you obtained with silver nitrate in testing for acid radicals no doubt consisted of silver sulphate, which is sparingly soluble in cold water.

ATROPIN.—As evidence of the absence of chromium you refer to a solution as "clear" when no doubt you mean "colourless." A solution of potassium chromate should be clear—i.e., free from suspended matter—although coloured.

D. B.—You found the powder to be readily soluble in water; nevertheless you report barium and the sulphuric-acid radical as present in it in quantity. We found some difficulty in understanding your account of the systematic testing for metals after the separation of the cupric-sulphide precipitate.

REGO.—The substance which was deposited when the powder was heated with concentrated sulphuric acid, and which you mistook for sulphur, consisted of anhydrous cupric, ferric, and zinc sulphates.

G. A. S. LEEDS.—We are not able to understand how you failed to detect the presence both of iron and of zinc. You seem to have been too easily satisfied as to the presence of a formate.

CURIOS.—While some of the conclusions at which you arrived are quite correct, it is impossible to assess their value in absence of any evidence as to how they were arrived at. Give details of the work done in any future analyses.

CLUB MOSS.—In examining the solubility relations of the precipitate produced by barium chloride, dilute nitric acid should have been employed—not the concentrated acid. Why?

COBALT.—While the ready solubility of the powder in water indicated the absence of sensible quantities of many very sparingly soluble salts, it could scarcely be accepted as indicating this with respect to calcium sulphate. See also the first part of the reply to "Nil Desperandum."

NITRAX.—An excellent report both as regards matter and form.

SPES.—If you merely evaporated the filtrate from the iron and zinc groups to dryness, but did not strongly heat the residue, you were certain to have a large quantity of ammonium sulphate and chloride left behind. It seems almost certain that the precipitate you obtained, later, with tartaric acid consisted of sparingly soluble ammonium hydrogen tartrate. Even although there is no indication of lead in Group I, this does not render it unnecessary to test for lead in the hydrogen-sulphide precipitate. Read also the reply to "Rego."

XERXES.—You do not seem to have tested for bismuth or cadmium. Read the reply to "L'Espérance."

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

BOOTS LTD. have opened a branch at Park Hall Parade, High Road, East Finchley, London, N.

MESSRS. BARKER & SON have purchased the business of Messrs. E. M. & M. T. Chater, 129 High Street, Watford.

MR. F. W. HEELY, Ph.C., has purchased the business of the late Mr. T. P. Richardson, chemist and druggist, Alford, Lincs.

"DISEASES AND REMEDIES."—The fourth edition of this useful book for chemists has recently been published by the C. & D. It is a concise survey of the most modern methods of medicine, telling the nature of ailments and describing the methods of treatment. The fourth edition has been carefully revised by a general medical practitioner, and certain parts of the book have been entirely rewritten. It is published at 3s. (by post 3s. 3d.), and can be obtained from the C. & D. offices in London or Australia and from the wholesale and sundries houses.

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

During the woman suffragist riots in London on November 21 the window of Messrs. Heppell's pharmacy in the Strand was among several smashed in that thoroughfare.

Blackpool chemists have adopted the following hours for closing for the winter months: Mondays, Tuesdays, Thursdays, and Fridays, 8.30 P.M.; Wednesdays, 1 P.M., and reopen from 6 P.M. to 8 P.M.

The flourishing Chrysanthemum Society in connection with the United Alkali Co., Ltd., Bristol, held their nineteenth annual exhibition on November 17. The entries were more numerous and better than in recent years.

The Local Government Board, on November 16, issued an Order and Circular to county councils, town and metropolitan borough councils, and urban and rural district councils in England and Wales making the general notification of pulmonary tuberculosis compulsory. The regulations will be enforced and executed by the sanitary authorities.

An election of three direct representatives of the medical profession to be members of the General Medical Council for the forthcoming five years has just taken place. The following candidates were elected: Dr. Henry William Langley Browne, Mr. Thomas Jenner Verrall, Dr. Henry Arthur Latimer. The number of voting papers issued was 25,245, and the number returned was 12,368.

The Cardiff City Council Watch (Strike Claims) Subcommittee have, in connection with the recent seamen's strike, directed the payment of between 5,000*l.* and 6,000*l.* in respect of Messrs. Begg & Co.'s warehouse. The payments include the following: Brunner, Mond & Co., 133*l.* 16*s.* 4*d.*; United Alkali Co., Ltd., 155*l.* 19*s.* 11*d.*; Electrolytic Alkali Co., Ltd., 2*l.* 3*s.* 3*d.*; Idris & Co., Ltd., 16*s.* 8*d.*; and the Liverpool Lint Co., 6*l.* 5*s.* 8*d.*

The members of the Institute of Chemistry were circulated recently in regard to the adoption of academic costume by members. A report to the Council of the Institute shows that less than 9.5 per cent. of the members replied to the circular, and of these 75 per cent. were in favour of the use of academic costume. The Council is of opinion that the evidence is insufficient to favour the adoption of the proposal.

The Cheshire County Analyst (Mr. J. Carter Bell) calls attention in his quarterly report to two samples of milk and cream preservative which it was stated in the accompanying circular could be used without detection. They consisted of a mixture of sodium nitrite and formalin, the nitrite evidently being added to prevent formalin being detected by the ordinary tests. By certain modifications of the tests the new preservative is easily detected when added to milk.

The Education Committee of the London County Council have decided to make application to the trustees of the fund raised by successive chairmen of the Council (for providing meals for necessitous children before this was defrayed out of the county rate) for a grant of 70*l.* to be made to the Association for the Supply of Spectacles for London Elementary Schools, as they had been informed that the Association had been compelled to discontinue such work since November 1 owing to lack of funds.

Miss Sophia Groom, of Watford, whose record of seventy years' domestic service with one family in one house has just terminated, was only fourteen when she entered the service of the Chater family, chemists, at 129 High Street, Watford. The business of Messrs. E. M. & M. T. Chater was sold a short time ago. Mr. Edward Chater died about two years ago, and Mr. Matthew Chater, chemist and druggist, retired to Market Harborough recently owing to advancing years. During her long period of service Miss Groom did not spend a single night away from Watford, and her only holidays were the annual trips of the local Baptist Sunday School. She has taken up her residence with Mrs. Montague, the widow of an assistant who was in the pharmacy for over fifty years.

Trade Misrepresentation.

In the course of the report of the special committee of the London Chamber of Commerce on trade misrepresentation (*C. & D.*, November 18, index folio 732), a member, writing in regard to the drug-trade, states that in Switzerland "the demand for English manufactures filled by Continental manufacturers selling their own makes as of English origin" has largely developed of late years. In Swiss pharmacies he found preparations got up in English style, labelled with English labels set up in English type, with a fictitious name given as the town from which the goods were obtained; one article which was discovered to have been made in Switzerland gave "Bath, England," as the place of manufacture. A firm of soap-manufacturers write that they have found counterfeits of their goods in most countries of the world. It has always, they state, been an exceedingly difficult matter to deal with any of them, more especially in the case of Portugal and Sweden, where an Englishman has little chance of taking any case into court, the local juries very rarely making an award unfavourable to their countrymen.

Birmingham Notes.

Vaseline ought to be a good selling line just now in Birmingham. The local "Mail" extols its virtues as a hair pomade, stating, "It puts off the evil day," meaning thereby the development of the silver streaks.

The House, long used as a pharmacy in Moseley Village by Mr. Brasington, and which was divided up several years ago into three or more shops, one being retained as a chemist's shop occupied latterly by Mr. Gascoyne, is now empty and to let.

The inaugural meeting of the M.P.A. was a brilliant affair, and passed off well. The musical arrangements were in the hands of Mr. Fred Thomas, a tenor of light timbre, who has from a boy been engaged with Messrs. Bellamy & Wakefield, Easy Row. He is now manager of their stock department. He was "found" for pharmacy when a treble solo chorister at St. Mary's Church, where Mr. Wakefield was vicar's warden for some years.

The value of the lady-dispenser market in the Midlands is indicated in a local advertisement as follows: "Lady dispenser and bookkeeper wanted to devote whole of her time to practice. Salary to commence 22*s.* 6*d.*, with steady increase if satisfactory. Address with references." Our correspondent states that the duties of such a post are gradually being extended, and says it is stated that even minor surgery, urine-testing, the delivery of medicines, and the calling for parcels from the wholesale houses are among the odds and ends considered essential. Nursing the baby has also been suggested, but this is strongly objected to. As a plum for the male scientist, a laboratory assistant well up in chemistry and physics is advertised for by a well-endowed school whose science teacher is a D.Sc. (London) at a salary of 7*s.* 6*d.* per week.

Liverpool Notes.

Through the recent diachylon poisoning case in Liverpool, at least one chemist has consigned his stock of this commodity to the waste-bin. Several have decided to decline to sell it in future.

Liverpool chemists are hoping to be quite busy next summer with the unusual crop of visitors that will come to visit the International Exhibition and White City, which it has been decided to hold from May to October 1912.

The numerous recent burglaries in the West-end of Liverpool have led to local tradesmen forming a committee to inquire into the matter. At a meeting held on November 21, Mr. A. C. Abraham, of Messrs. Clay & Abraham, suggested that a protest be made to the Corporation Watch Committee in regard to inadequate police protection.

There has been quite an awakening among Liverpool pharmacists. There is a feeling that if that American company comes to this side of the "Pond," Liverpool will be their starting-point. Meetings of the committee formed by the mass meeting of Liverpool pharmacists some time ago and of the other formed last week are to be held

on Thursday evening, November 23, to discuss the National Insurance Bill, Shops Bill, and "the more recent developments in the drug-trade."

Mr. J. H. Battley has been presented with a silver cigarette-case by a few members of the Liverpool and Birkenhead Chemists' Associations, as a token of their appreciation of the excellent way in which he arranged the musical programme of the recent smoking-concert held in aid of the Pharmaceutical Benevolent Fund, this being the third annual event in which the musical programme had been entrusted to him. The two Associations felt also that the success of the concerts was to a large measure due to his untiring efforts. The presentation was made at a meeting of the committee held in Liverpool on November 16. The recipient, who was obviously taken by surprise, in thanking the company, said it had been on his part a "labour of love," and that he still had a few items up his sleeve for future occasions.

Manchester Notes.

The cold snap in the weather conditions have improved business, although everyone seems to find the month a very poor one. This is no doubt due to tightness of money and the great amount of unemployed at present.

An excellent photograph by Mr. J. Cleworth, Manchester, of "Champion Life-saving Team" of the Manchester City Police, appeared in the "Evening Chronicle" of November 15. A large flashlight photograph by Mr. Cleworth of a group of University students also appears in this month's issue of the "Manchester University Magazine."

"A well-known Manchester chemist," whose name, however, is not disclosed, informs a Manchester evening paper that a form of cold is prevalent which is the direct result of the exceptionally long and hot summer. "It is the reaction." The cold is attended by slight fever, and some sufferers, who have not had influenza, mistake it for that complaint.

The third annual dinner of the Salford Pharmacists' Association, held on November 15, was a great success. The inimitable sketches by Mr. Granville Shaw, Ph.C., made one almost imagine that the gathering was of a political nature from the cheering, booing, and hissing which greeted each particular sketch of well-known politicians. Mr. W. Mercer Gray, pharmacist, proved to be in excellent voice. It is interesting to note that four of the six artists were chemists.

Nottingham Notes.

On Sunday night the premises of Messrs. Gray & Selby, opticians, Pelham Street, were raided by burglars. The thief, or thieves, made off with booty comprising nearly a score of opera-glasses, as well as field-glasses, lenses, and other optical goods.

Acting on the instructions of the Improvement Committee of the Nottingham Corporation, the city engineer has prepared plans for the suggested widening of Friar Lane—in which a fatal carriage accident occurred only a few months ago—which would entail the removal of Mr. F. Ross Sergeant's pharmacy. It is only about two years since Mr. Sergeant moved from the slightly smaller shop next door into the present premises, which he had fitted up in modern style. If the suggested alteration takes place it will be another considerable upheaval for him.

Sheffield Note.

The India Office has appointed Mr. C. A. Irwin, an ex-student in the Sheffield University Metallurgical Department, as Assistant Chemist to Professor A. McWilliam, of the Sheffield University Applied Science Department, who is going out to India next month to take up the newly created post under the Indian Government, of Metallurgical and Analytical Inspector of Steel in India.

Contracts.

Brentford District Council.—Mr. A. Hawthorne, chemist and druggist, Brentford, for 40 gals. of disinfectant at 3s. 6d. per gal., less 2½ per cent.

London County Council.—For proto-sulphate of iron: Gas Light and Coke Co., 3,135l., and T. Herschel Jones & Co., 2,302l. For sponges at estimated values: John

Goldhill & Sons, 70l.; John Phillips & Sons, Ltd., 294l. For soap, Edw. Cook & Co., Ltd., 11l.; Isdale & McCallum, Ltd., 180l.; Palmer & Co., Ltd., 416l.; T. B. Rowe & Co., Ltd., 182l.; J. Salmon & Son, 50l.; R. Wheen & Sons, Ltd., 1,230l.; Wilkie & Soames, Ltd., 537l.

Government Contracts.—*Crown Agents for the Colonies*: G. Curling, Wyman & Co., May & Baker, Ltd., and Southall Bros. & Barclay, Ltd., for drugs. *General Post Office*: Cardiff Alkali Co., Ltd., for ammonium chloride.

Fires.

Damage exceeding 30l. was caused by fire due to the fusion of an electric wire at the residence of Mr. J. S. Snell, chemist and druggist, Owen Street, Accrington, on November 20. The outbreak was subdued before the arrival of the Fire Brigade.

A fire broke out on November 20 in the basement of the pharmacy of Mr. J. Stovin, chemist and druggist, Central Buildings, Seaside Road, Eastbourne. The flames were prevented from spreading to the other part of the premises, but the contents of the basement, which was used as a store, were very much damaged by fire and water.

Shortly after midnight on November 21, a series of violent explosions attracted attention to an outbreak of fire in one of the railway arches in Seacole Lane, used as a proprietary-articles store by Messrs. Barclay & Sons, Ltd., of Farringdon Road, London, E.C. The fire was overcome in about twenty minutes, and the resultant damage was small, not being sufficient to interfere with the ordinary course of business. The explosions were due to the bursting of heated sparklet bulbs.

Football.

London F.C. v. Westminster F.C.—This Inter-Pharmacy League match was played at Hanwell on November 18, under unfavourable climatic conditions. In the first half the "Cyanides" showed the better form, one goal being registered in their favour. After the interval the "Westminsters" made scores equal. Consequently the game became very fast, London gaining five goals to Westminster's one. The game thus ended in a win for the London team by six goals to two.

Inter-Pharmacy Football League.—Square F.C. v. South of England F.C.—This match, played under wretched weather conditions, at Wormholt Farm, Shepherd's Bush, on November 18, resulted in a win for the Souths by three goals to one. In the first half the game was "scrambly," with the Square team doing most of the pressing. Shortly after the interval Bray registered the first goal for the Souths, but Ireland made the scores equal about a quarter of an hour from the finish. From a penalty awarded Haslam scored for the Souths, and the same player, about two minutes before time, ran through the Square defence and put the ball through the goal-mouth again.

From Various Courts.

At Hull on November 17, a sentence of twelve months' imprisonment, with hard labour, was passed on Thos. Wm. Martin (25), who was charged with feloniously administering laudanum to Ethel Richardson with intent to kill. Prisoner pleaded guilty to misdemeanour.

At Liverpool, on November 20, the charge against Isabella Mitchell, Everton, of attempting to murder her son by administering belladonna, was dismissed. It was alleged that accused had poured some eye-drops, given for the boy at a local hospital, into some tea which she and her two sons partook of. Subsequently accused and one of the sons suffered from symptoms of belladonna-poisoning.

At Mansion House Police Court, on November 21, Ernest William Legg (17), packer, 40 Hayles Street, Southwark, was fined 5l., or in default one month's imprisonment with hard labour, for stealing ten bottles of phosferine, value 1l. 5s., from his employers, Messrs. Ashton & Parsons, Ltd., Belle Sauvage Yard, E.C. Mr. Harry Edward Gooch, works manager, deposed that a month ago two lads in their employ were charged at that Court with similar offences, and were treated with great leniency, being discharged after a week's remand. This, however, had no effect towards stopping the leakage.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

Mr. P. J. D. Fielding, Ph.C., Cork, has been elected on the committee of the Cork Chamber of Commerce.

Messrs. Fannin & Co.'s tender for surgical appliances for the Enniscorthy Asylum Board, being the lowest, has been accepted.

Mr. D. W. Elliott, Ph.C., Shaftesbury Square, Belfast, has been appointed on the committee of the newly opened Crescent Unionist Club, Belfast.

Mr. Wm. Haslett, ex-President of the Chemists' and Druggists' Society of Ireland, has been appointed Vice-Chairman of the Ormeau Ward Committee of the Belfast Citizens' Association.

At Belfast Recorder's Court last week, Mr. Allan McCurdy, Ph.C., 30 York Road, was awarded six guineas compensation by Judge Carrigan for malicious damage to a plate-glass window in his premises.

At Cookstown Board of Guardians last week, Dr. Harris complained of delay in the delivery of cyllin by the drug-contractors. Dr. Mann also complained of delay in the delivery of drugs. Both matters were referred to the contractors.

There is considerable controversy taking place at Londonderry regarding two rival water-supply schemes. Messrs. Prior & Co. are taking advantage of the fact to advertise imported table-water which they sell by the quart or gallon.

Street-widening Claim.

A five days' arbitration has just concluded in Belfast arising out of the decision of the Corporation to widen North Street. The authorities had directed Messrs. Dobbin & Co., Ltd., chemists and druggists, to set back their premises at 45 and 47 North Street, a distance of 8 ft. 9 in., so as to bring them into line with other establishments, and the arbitration was held to determine the price that should be paid for acquiring this ground. The premises have a frontage of 38 ft. 4½ in., and Messrs. Dobbin claimed over 4,000/. Mr. J. Milne Barbour, D.L., President of the Chamber of Commerce, was the umpire, and Messrs. Wm. McCormick, J.P., and R. I. Calwell acted as arbitrators, the former being nominated by the Corporation and the latter by Messrs. Dobbin. The witnesses examined included Messrs. William, Dobbin, Henry Hunter, J. Smith, and Busby for Messrs. Dobbin. The result will be announced in a few days.

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of new news, which you desire to call his attention.

Brevities.

Mr. Andrew Forrester, chemist and druggist, has left Laurieston, Falkirk. His friends gave him a handsome parting gift.

Claims against the late Peter Wilson, chemist and druggist, 11A Causewayside, Edinburgh, are to be lodged with Mr. Robert Stewart, solicitor, 24 Castle Street, Edinburgh.

Pitkeathly Mineral Wells, Bridge of Earn, which for a long time were leased by Messrs. Reid & Donald, Perth, have been purchased by Schweppes, Ltd., London. The wells are one of the few spas which Scotland has, and at one time were as popular as Strathpeffer.

Mr. John Melville, chemist and druggist, has acquired the branch business of the late Mr. Charles Kerr, Ph.C., at 197 Perth Road, Dundee. Mr. Melville has managed this branch for some time, and was formerly with Messrs. Duncan, Flockhart & Co., Edinburgh. The business is to be carried on as Kerr & Melville.

The premises of Mr. A. Adam, chemist and druggist, Alyth, had a narrow escape from total destruction by a fire which broke out at seven o'clock on Saturday night in the dwelling-house on the third floor over the shop. Mr.

Adam and his assistants were busy removing the more valuable parts of the stock to a place of safety when they were advised by the police to desist on account of the danger.

At a meeting of the Dunfermline Co-operative Society, held last week, a member complained that a qualified lady assistant had been appointed in the drug department at 80/. per annum. It was a hardship on qualified men, he insinuated, but the Chairman replied that the lady was as fully entitled to be considered as a male. Another member thought there were too many hands in the drug department for the amount of business done, but Mr. Robertson, convener of the drug department, denied that.

An arrangement has been come to between Lever Brothers, Ltd., soap manufacturers, Port Sunlight, and Ogston & Tennant, Ltd., soap manufacturers, Aberdeen and Glasgow, by which the businesses will in future be worked in agreement. The Scottish company is erecting large works at Glasgow to take the place of those recently destroyed by fire. The arrangement includes a provision under which Ogston & Tennant, Ltd., will obtain supplies of oil from the Congo, where Lever Brothers, Ltd., have concessions from the Belgian Government.

Edinburgh.

Mr. David Lister, chemist and druggist, formerly of South Queensferry, who is now fruit-farming in British Columbia, has secured a post under the municipality of Summerland, B.C.

The Rev. Wm. Johnstone, M.A., assistant, St. Bernard's United Free Church, Edinburgh, has been unanimously elected to the pastorate of Hightae and Dalton United Free Church. Mr. Johnstone is the youngest son of Mr. Walter Johnstone, chemist and druggist, Cromarty.

Glasgow and the West.

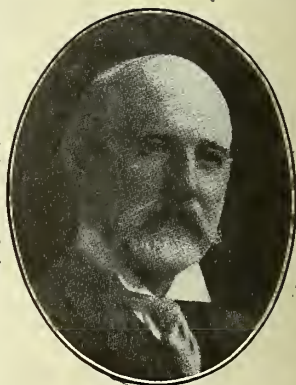
Mr. W. Wood Wilson, chemist, Great Western Road, has a very attractive display of "Kepler" preparations.

Mr. Thomas McMaster, chemist and druggist, Partick, is opening another branch pharmacy in the Dowanhill district. This will make Mr. McMaster's sixth branch.

Mr. George Robertson has disposed of his two pharmacies in Partick—one of them to Mr. John Neil, chemist and druggist, 557 Sauchiehall Street, and the other to Mr. Milne, who has been managing it.

A Jubilee Celebration.

Mr. Robert McAdam, J.P., whose jubilee of association with the Glasgow Apothecaries' Co., Ltd., was referred to in the *C. & D.* last week, was entertained to dinner in the Liberal Club, Glasgow, on Friday evening, November 17, by a number of personal friends. Sir Edward Evans (Liverpool), President of the British Pharmaceutical Conference, presided, and Mr. Michael Swan acted as croupier in the unavoidable absence in London of Sir Thomas Mason. Among those present were Dr. N. G. Cluckie (Greenock), Mr. J. Laidlaw Ewing, and Mr. Robert Dick (Edinburgh), and Mr. William Hislop, of Messrs. Brown, Mair, Gemmill & Hislop, writers. We append our



MR. ROBERT MCADAM.

Glasgow representative's report of the function, and give a reproduction of the portrait used on the dinner-card. Mr. McAdam is a native of Newton Stewart, where he was born in 1842. He was educated at Gelston Parish School, and before he was fourteen was apprenticed to the late Mr. John Craig, chemist, Hawick, with whom he remained five and a half years. He then went to Glasgow to the Apothecaries' Hall, a retail and wholesale establishment which had been started in Argyle Street by medical men in 1805, six years later removing to Virginia Street. In 1876 Mr. McAdam (who had qualified in 1871)

succeeded the late Mr. James McDonald as manager of the company, became a partner, and when some years ago the business was converted into a limited company, Mr. McAdam naturally became managing director.

The loyal and patriotic toasts having been honoured, Mr. Borland proposed, and Mr. John Walker, J.P. (of the "Hall"), replied for, "Our Naval and Military Forces." The health of the guest was then proposed by the Chairman. Sir Edward referred to his long and intimate acquaintance with Mr. McAdam, and said it was rather unique in commercial annals that a firm established so far back as the year 1805 should have in Mr. McAdam but a fourth manager, which was a record to be proud of. Sir Edward also referred to Mr. McAdam being one of the original members of the Liberal Club, and almost from its formation convenor of one of its committees, so that the members and his friends felt they could not let this interesting event in his life's history slip past unnoticed. Sir Edward also spoke of their guest's genial personality, as he could honestly testify from long and close contact and happy golfing holidays along with him and Messrs. Dick and Ewing, and he expressed the hope that Mr. McAdam would be spared to his friends and to rule at the "Hall" in Virginia Street for years yet to come. Mr. McAdam feelingly replied, thanking his friends for the high compliment paid him, referring to some outstanding events of his fifty years spent in Glasgow, and concluded by saying that, though quite overcome by their kindness, he felt rich in the possession of so many kind friends. The other toasts were "The McAdam Family," proposed by Mr. D. L. Laidlaw, J.P., and acknowledged by Mr. Thomas Clement; "The Drug Trade," by Dr. Cluckie, to which Mr. Ewing replied; and "The Chairman," by Mr. Michael Swan, J.P. With songs, etc., the evening was altogether a happy one.

FRENCH NEWS.

(From the "C. & D." Paris Correspondent.)

ANTI-ADULTERATION SERVICE.—Dr. Emile Roux, head of the Anti-adulteration Laboratory at the Ministry of Agriculture, has been nominated "Director of Scientific and Sanitary Branches of the Anti-adulteration Service."

VETERINARY BICENTENARY.—The "plaquette," or rectangular medal, engraved by Dr. Paul Richer in commemoration of the bicentenary of the Lyons Veterinary School, bears on the obverse the portrait of Professor Arloing, and on the reverse a representation of anti-tuberculous bovine vaccination.

OPOPONAX CULTURE.—The "Soleil" states that the culture of opoponax in Persia having been neglected, the supply has fallen off. As the plant grows wild on the shores of the Mediterranean, it is proposed to add this to the long list of perfumery-plants already cultivated on the Riviera, and thus surmount the difficulty.

CONSUMPTION OF SPIRITS.—Statistics presented by Dr. Jacques Bertillon to the Academy des Sciences Morales show that the consumption of spirits in the larger French cities has diminished from 7.8 litres in 1900 to 4½ litres per head. The 1897 law removed certain charges on wine and beer and raised the taxes on spirits, and this has apparently had the desired effect.

BIOLOGICAL INSTRUCTION.—The Biological Chemistry Laboratory at the Paris Pasteur Institute, organised to allow students and others already familiar with general chemical methods to obtain practical knowledge of this special branch, has been opened for a three-month course, under the direction of Professor Gabriel Bertrand, at the Institute, 26 Rue Dutot.

THE INTERNATIONAL SANITARY CONFERENCE now in session at the French Foreign Office has been convoked to revise, modify, and complete the Sanitary Convention drawn up at Paris after the previous (1903) Conference. The development of means of rapid communication and other features of twentieth-century existence render it necessary for all civilised countries to combine to combat certain epidemics in a systematic and uniform manner. The work begun at Venice in 1892 has been steadily, if slowly, carried forward. The present Conference is dealing especially with (1) precautions to be taken against yellow fever, (2) plague (destruction of rats aboard ships),

and (3) cholera. M. Barrère, French Ambassador at Rome, has been elected Chairman.

STERILISING DRINKING-WATER.—The question of the best method of efficiently sterilising the public supply of drinking-water is shortly to be considered by the Paris Municipal Council. The probability appears to be that the sodium-hypochlorite process will be preferred. On two occasions—(1) where the supply ran short and water had to be drawn from the river Marne, and (2) when typhoid fever was prevalent in the district where the Vannes springs are situated—this process was adopted. In the latter case, though typhoid fever broke out at Paris, the number of patients progressively diminished (in the part of the city supplied with Vannes water) after sterilisation of the drinking-water had been carried out. The alternative processes are ozone and ultra-violet rays.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. F. C. HELLETÉ, chemist, Brighton, is now sufficiently recovered to return home, and steady progress is being still maintained.

MR. A. HAWTHORNE, chemist and druggist, 100 High Street, Brentford, has been re-elected on the Brentford Burial Board for a further term of three years.

PROFESSOR W. H. PERKINS, F.R.S., and Professor E. Rutherford, F.R.S., of the Victoria University, Manchester, have been elected corresponding members of the Munich Academy of Sciences.

MR. GEORGE HAMPTON, President of the Leicester and Leicestershire Chemists' Association, has written to the "Leicester Mail" dissociating himself from an inaccurate article on the National Insurance Bill which appeared in that paper.

MR. HUBERT HUMPHRY, chemist and druggist, F.S.M.C., son of Mr. Horatio Humphry, chemist and dentist, Dartmouth, has passed the first professional examination for the Licentiate in Dental Surgery of the Royal College of Surgeons in mechanical dentistry.

In the biography of Mr. W. Browne in our last issue (index folio 753) we stated that five qualified assistants are employed at Mr. Browne's pharmacy. This should have read three qualified and two junior assistants, but the point to be emphasised is that each prescription dispensed at the establishment goes through the hands of three qualified men.

MR. J. O. EVANS, chemist and druggist, 18 Wilton Road, Victoria, London, S.W., was the guest of honour at a complimentary dinner at the Adelphi Galleries on November 23. Mr. Evans pluckily endeavoured to save an English boy scout who was drowned at Hardeot last August while touring with other lads in France. Mr. Evans is shortly to receive the Royal Humane Society's award for his bravery.

COUNCILLOR C. E. FOX, J.P., Ph.C., was entertained by the local Town Council to a banquet at the Holborn Restaurant, London, W.C., on relinquishing the office of Mayor of Bethnal Green, which he has held on four occasions. He was presented with a collar upon which to wear the ex-Mayor's badge, and which contained four bars, on each of which was the word "Mayor" with the dates of Mr. Fox's years of mayoralty. Mrs. Fox at the same time received a specimen of the heather given to the children of the borough (in connection with the Coronation) mounted in silver and enclosed in a glass case.

THE OPIUM CONFERENCE.—The United States, as initiating Power of The Hague Opium Conference, is drawing up the programme which is to be the basis of deliberations. The Right Rev. C. E. Brent, Protestant Episcopal Bishop of the Philippine Islands, will be President of the Conference. The U.S.A. delegates are Dr. Hamilton, J. Wright, of Maine, and Mr. Henry J. Finger, of California. Bishop Brent sailed from New York en route to The Hague on November 18.

LEGAL REPORTS.

TRADE LAW.

Spirit of Nitre.—At Belper on November 16, Samuel Hinds was fined 1s. and 21s. costs for selling sweet spirit of nitre which was not of the B.P. standard of strength. Mr. C. W. Southern, chemist and druggist, of Market Place, Belper, who supplied the drug to the defendant last March, stated that he then had a guarantee from the makers that it was up to the standard strength, and the drug was sold by the witness to the defendant in good faith.

An Exhibition Stand.—In the Marylebone County Court, before Sir W. Lucius Selfe, Robt. Pulling, contractor, claimed 9l. 4s., the price of erecting a stand and for other work at the Chemists' Exhibition, on behalf and to the order of Messrs. John Morgan Davis & Sons, chemists, Bishopsgate, E.C. The defence was that the stand was not so large as the one defendants had had at several previous Exhibitions, which had never cost more than 5l. Plaintiff said that the amount charged was quite reasonable, and his Honour gave judgment for him, with costs.

High Court Cases.

Unless when otherwise stated these cases have been heard in the High Court of Justice, London.

DUTIES OF AUDITORS.

In the Court of Appeal on November 20, the case of *Mead v. Ball, Baker, Deed, Cornish & Co.*, of No. 1 Gresham Buildings, Basinghall Street, was heard upon the appeal of the plaintiff, Mr. John Philipps Mead, from a judgment of the Lord Chief Justice. This is the case in regard to the accounts of Henry Squire, cash chemists, Ltd. (*C. & D.*, 1911, I., 277). After arguments of counsel, their Lordships on Tuesday dismissed the appeal with costs.

APPEAL ALLOWED.

Lords Justices Vaughan Williams, Buckley, and Kennedy on November 23, heard an appeal by the defendants in the action of the British Association of Glass Bottle Manufacturers, Ltd. *v.* Nettlefold, in which it was sought to set aside an order of Mr. Justice Scrutton reversing an order of Master Bonner, directing an inspection of a certain document which was a contract with a third person (*see C. & D.*, July 8, index folio 41).

The appeal was allowed by a majority of the Court (Lord Justice Kennedy dissenting), and the order of the Master restored.

ROYAL SOCIETY OF MEDICINE.

The appeal by Dr. Paul Z. Hebert against the judgment of Mr. Justice Darling adverse to him in his action against the Royal Society of Medicine (*C. & D.*, 1911, I., 42) for alleged libel said to have been published in a communication sent by Mr. J. Y. W. Macalister, a secretary of the defendant Society, to the effect that the plaintiff was not, as claimed in a certain advertisement inserted in the "British Medical Journal" as to a book by the plaintiff, a Fellow of the Society, came before the Court of Appeal on November 18, and was dismissed with costs.

A PULSOCON MANAGER.

Mr. G. J. Macaura was defendant on November 20 in an action brought before Mr. Justice Channell and a special jury in the King's Bench Division by Mr. Arthur Wade, who was for some time engaged as manager of Mr. Macaura's institute in Hanover Square, and who claimed the balance of salary which he alleged to be due to him, and damages for alleged wrongful dismissal. The defence was that plaintiff was not engaged on the terms alleged (15l. a week) and that he had been dismissed for disobedience to orders. Eventually judgment was entered for Mr. Wade for 262l.

REEVES' PAINTS.

In the Chancery Division on Tuesday the case of *Reeves & Son, Ltd., v. Boots Cash Chemists (Lancashire), Ltd.*, which is an action to restrain an alleged passing off of artists' colours, was mentioned to Mr. Justice Parker on an application by the plaintiffs to have December 5 fixed for the trial.

Mr. Martelli, K.C., said that the case would not occupy more than two days, and he understood that his Lordship could not give them an earlier date.

Mr. Romer, K.C. (for the defendants), objected on the ground that December 5 would interfere with Messrs. Boots' Christmas trade. He wanted the action to be tried next week.

His Lordship said his arrangements would not permit of that.

Mr. Martelli pleaded that the matter had been hanging over for a long time.

Mr. Romer said that the plaintiffs were attacking the good faith of Messrs. Boots, and he proposed to call their assistants from Lancashire to rebut the charge.

Mr. Martelli suggested that the evidence of the defendants' officials would be sufficient. He did not accept the statement that the bringing up of these witnesses would cause any inconvenience to Messrs. Boots' Christmas trade. If December 5 commenced their Christmas trade, the plaintiffs would probably be told that it did not terminate until after February.

After further discussion it was arranged that the defendants' objections should be put in evidence and the application renewed on Thursday.

A SIGN IN CHESTER.

In the Chancery Division on November 16 and 17 Mr. Justice Neville had before him an action by Boots Cash Chemists (Western), Ltd., against Mr. Thomas Charles Johnson and Mr. Hugh Rissart, tailors, of Eastgate Row South, in Chester, and Mr. Wm. FitzHugh, of The Grange, Ludham, Norfolk.—It appeared that the plaintiffs have a shop on the north side of Eastgate Row, and the defendants have a shop exactly opposite on the south side. The defendants claimed that they alone were entitled to display any signboard over the public way, and claimed the right to have a signboard projecting from their shop across the whole width of the Row, and that the plaintiffs had no right to have any projection whatever on the north side of the Row. There was no question of public rights in the case, as the public were not interfered with by either party.

Evidence as to the complicated arrangements between the two properties was given on either side.

Mr. Justice Neville, giving judgment, said that prior to the conveyance to plaintiffs of their property the defendants were the owners in fee of both properties, and the whole position turned upon what was demised to plaintiffs under their conveyance. In his opinion the defendants had made out no title to the soil which supported their sign, which had only existed by leave and licence from the adjoining owners. He found that the soil which was vested in the defendants had been conveyed to the plaintiffs and had passed to them, and that the defendants had no rights in the signboards. His Lordship granted plaintiffs a declaration that they were entitled to the soil of the Row between their shop and defendants' shop, subject only to the rights of the Corporation, and ordered the defendants to pay the costs of the action.

Medicine-stamp Act, 1812.

OBJECTIONS TO GUARANTEE-LABELS.

At King's Heath Police Court on Friday, November 17, Thomas Henry Foden, Ph.C., High Street, King's Heath, was summoned by the Commissioners of Customs and Excise for selling dutiable medicines unstamped.

Mr. Cecil Simpson, solicitor, who appeared for the Commissioners, explained that there were four summonses, and as he thought the only point in dispute would be the gravity of the offence, he suggested they should be taken together.

Mr. C. H. Kirby, who defended, on the instructions of the Chemists' Defence Association, assented to this course.

Mr. Simpson then said that of the articles mentioned in the summonses one was a laxative, another a corn-cure, and a third neuralgia-pills, all Mr. Foden's special preparations, so that they came within the words of the Act; and being proprietary medicines, they were liable to stamp-duty. In the first offence a bottle of Foden's figs and manna was labelled with a proprietary-medicine label of a very unsatisfactory character, which even the Chemists' Defence Association had condemned. It resembled in many respects the official stamp label, a resemblance which Mr. Simpson described as very

unfortunate, without wishing to go further. These labels which were supplied by a firm of printers, frequently cropped up in cases; but he affirmed that they ought not to be used, inasmuch as they might mislead the public into a belief that there was an official stamp label upon the articles, and mislead the chemist or his assistant into thinking that the proper medicine-stamps were affixed when they were not. Various purchases were made on behalf of the Revenue officer at the defendant's shop, spread over three weeks, and as the articles were taken down from the shelves without any selection at all, the conclusion was irresistible that a considerable number of unstamped articles were in the shop. These should have been stamped, according to the Act, not only when they were sold, but when they were fit for sale or exposed for sale, and they should have been stamped, therefore, before they were brought into the shop. In reply to a letter from the Commissioners of Customs and Excise, asking for any explanation he might care to give, Mr. Foden wrote an explanation which the Commissioners could not accept. Subsequently considerable correspondence took place with the Secretary of the Chemists' Defence Association, but the Commissioners did not regard anything put forward as amounting to a satisfactory explanation. True, Mr. Foden was away for some time, but Mr. Simpson urged that a grave responsibility rested upon a chemist as to the persons he employed; nothing more serious could be imagined than the possibility of a drunken assistant putting up medicines with no labels, or wrong labels, upon them. The leading case of *Emery v. Nolloth* clearly established that the owner must take the responsibility for anything done by the person he left in charge of his shop or business.

Mr. Kirby, replying to the Chairman of the Bench (Mr. G. F. Lyndon), said the defendant pleaded guilty. As proprietor of the business he was legally responsible.

The evidence was brief, and of a formal nature. Richard H. Williams, an Excise officer, informed the Magistrates that his maidservant, acting on his instructions, made several purchases at defendant's shop during September. He initialled the articles which he received from her, and these were now put in as evidence. Helen Foster, the servant referred to, stated that on September 2 a bottle of syrup of figs was handed to her by an assistant, who took it from a shelf at the back of the counter. Five days later she went to the shop and asked for a Dr. Clay's corn-cure. The assistant gave her corn-silk, and when she pointed this out Mr. Foden, who was present, said it was quite as good. The same evening Mr. Foden exchanged the silk for a bottle of corn-cure, which he took out of a case. On September 16 she purchased a box of neuralgia-pills, Mr. Foden himself supplying them.

Mr. Kirby then addressed the Magistrates. He admitted defendant's legal responsibility, and it was only for the Magistrates to consider whether the case called for a light or a heavy penalty. Mr. Foden, he pointed out, was not notified of anything wrong until some time after the sales, so he had no means of making inquiry at the time; and he suggested the same procedure as is adopted under the Sale of Food and Drugs Acts might be taken in such cases.

Mr. Simpson (interposing) said there could be no objection in that course, as this was not a sample. The only thing was there was no stamp upon it.

Mr. Kirby (continuing) said there was no objection to the Customs and Excise asking an explanation from the defendant, but certainly they had no right to use his reply as evidence against him. In this case, it so happened, it mattered little, because Mr. Foden was a perfectly honest man, and was prepared to give in the witness-box the same explanation he gave at the outset. He had been preparing for an examination as an ophthalmic optician, and while theoretically he must be deemed to have known what was taking place during his absence, he was entitled to assume that his assistant was competent to sell harmless preparations across the counter. It was during this period that a number of these domestic preparations were packed by the "locum" and the assistant. The label of which complaint had been made bore the words "Guaranteed Genuine" and the name and address

of Mr. Foden, in which respect it differed from the Government stamp; the sizes, too, and the colour differed, and it did not occur to Mr. Foden that his stamp could be mistaken for the Government stamp. He did not get his supply from the printers until March last, and it was estimated that not more than fifty could have been used, while the remainder had now been destroyed. Defendant was also prepared to show that during the last three years he had spent eighteen guineas on Government stamps, chiefly 1½d. stamps, clearly showing that there had been no systematic evasion.

Mr. Foden went into the box, and raised a laugh by his statement that during the fourteen years he had been in business he had never been summoned except for having his chimney on fire. He confirmed the statements made by Mr. Kirby. Since receiving the complaint he had gone through the stock, and found nothing which was not properly stamped. Only sufficient stock was prepared to last a few weeks, and this convinced him that the articles mentioned in the summons were packed during his absence.—Replying to Mr. Simpson, defendant admitted the seriousness of what took place in his absence. He was "up to the ears" in study at the time, as the examination was near, and it was for this reason that he did not look through the stock after hearing of the unsatisfactory conduct during his absence.

Mr. Kirby advanced the proposition that the putting-up of the preparations had not been completed, and that the Commissioners never required the stamp to be put on until the article is sold.

Mr. Simpson pointed out that the regulations are strongly to the effect that the stamp must be put on as soon as the article is exposed for sale.

Mr. Kirby agreed that the Act says so, but it is not enforced.

The Chairman said the Bench regarded the case as a serious one. Mr. Foden, however, had given a frank explanation, and, taking this into consideration, they imposed a fine of 5*l.* and costs in the first case, and in regard to the other three summonses ordered the payment of costs. He took occasion to complain that a letter from Sir Thomas Barclay, relating to the character of the defendant, which Mr. Kirby had previously handed in, had been read by his colleagues before they had arrived at their decision.

Mr. Kirby pointed out that the defendant had pleaded guilty, and that it was usual to allow evidence of character.

The Chairman: Not before the Bench has come to a decision.

Sale of Food and Drugs Acts.

CITRIC ACID.

At the Stipendiary Court, Longton, Staffs, before the Deputy Stipendiary (Mr. V. Graham Milward), on November 22, Thomas Bentley, chemist and druggist, 27 Stoke Road, Hanley, was summoned under section 6 of the 1875 Act, for selling four ozs. of citric acid which was stated to contain 0.004 per cent. of lead.

Mr. H. R. Fanner (Deputy Town Clerk of the County Borough of Stoke-on-Trent) prosecuted, Mr. Cyril H. Kirby (Neve, Beck & Kirby, solicitors to the Chemists' Defence Association) appeared for the defendant, and Mr. Cuthbert Smith, instructed by Messrs. Whitley & Co., Liverpool, appeared for Messrs. Evans Sons Lescher & Webb, Ltd., the warrantors.

Mr. Fanner explained that the facts he proposed to lay before the Court were not disputed. The citric acid purchased at Mr. Bentley's shop was found to contain 0.004 per cent. of lead, equal to two-sevenths of a grain per lb. The limit of lead allowed was 0.002 per cent., or one-seventh of a grain per pound. He understood that the defendant relied on a warranty contained in the invoice of Messrs. Evans Sons Lescher & Webb, Ltd., of Liverpool, but the firm, while not disputing the warranty, contended that the citric acid was contaminated after it left them, or alternatively that it was not the article supplied by them.

Evidence in support of this statement was called. Mr. E. W. T. Jones, F.I.C., public analyst, corroborated his analysis. In reply to Mr. Kirby, he said he applied the Pharmacopœia test, but his report was not based on

that, but on the more refined test of Warrington's, which excluded the possibility of the presence of copper or iron being mistaken for lead. Asked if it was practicable for a retail chemist to apply the test, Mr. Jones said it was a colour test and the presence of lead resulted in a distinct darkening. Witness knew there had been a good deal of discussion as to the amount of lead permissible. He took the standard of 0.002 per cent., or one-seventh of a grain per lb., as recommended by the Food Department of the Local Government Board. Cross-examined by Mr. Cuthbert Smith, witness said Messrs. Evans were a firm of the highest standing. They published Analytical Notes annually, and in respect of 1909 (the year in which Mr. Bentley purchased from them) it was stated that over forty samples were analysed and the purity fell within the limit of 0.0005 per cent. Lead could not be admitted from a glass bottle in the ordinary course. It could, of course, be conveyed to the citric acid if an instrument used for lead had been inserted in the bottle, or if a cork contaminated by sugar of lead had been used. He agreed with Mr. Cuthbert Smith that if Messrs. Evans received three casks of citric acid in one consignment from the manufacturers it would be a fair way of making an analysis to take a sample from each cask and analyse them together. Replying to the Deputy-Stipendiary, Mr. Jones said the Local Government Board had made a liberal allowance in the standard fixed. Lead was a cumulative poison.

Mr. Bentley then deposed that he bought citric acid from no one but Messrs. Evans, and the last was in 1909. It had been kept in the bottle in which it was received, and in order to supply the inspector with 4 oz. the bottle had to be emptied. So far as he knew nothing had been done to contaminate the citric acid while it had been in his possession. Every knife used was thoroughly cleaned and washed after each operation. Witness added that the scrapings of the bottle had since been analysed and had been found to contain an even greater percentage of lead (0.005 per cent.) than the bulk.

Mr. Boothby, defendant's assistant, said he remembered cleaning the knife before using it to get the acid out of the bottle for the inspector. By the Stipendiary: Only sticky knives were washed. Knives which were used for powders were merely wiped and put away. About twelve knives were in use in the shop.

Correspondence was put in in which Messrs. Evans stated they had never passed a sample of citric acid with such a high percentage of lead as that shown by Mr. Jones's analysis. The bulk from which Mr. Bentley's pound was taken showed, according to the analytical records of the firm, only one-eighth of the amount of lead found by Mr. Jones.

Mr. J. Herbert E. Evans said it was impossible that the sample taken by the inspector could have been supplied by his firm, or else it had been contaminated in some way since. He explained that the crystals were systematically analysed when received in bulk from the manufacturers, and if they passed the test they were ground and put into stock, nowhere coming into contact with lead. The records showed that three casks, which constituted the bulk from which Mr. Bentley was supplied, showed on analysis 0.0005 per cent. of lead.

Mr. George W. Marris, Ph.C., one of Messrs. Evans' laboratory staff, gave details of precautions taken by the firm against adulteration, and he produced records of analyses showing that the stock from 1908 onwards well conformed to the Local Government Board standard.

Mr. Cuthbert Smith, on behalf of Messrs. Evans, urged that they had taken every possible precaution to sell an article which conformed to the Government standard. He suggested it was unreasonable that warrantors should be held responsible for an article they had supplied two, ten, or twenty years previously. The gravest possibility of all was the knife used in Mr. Bentley's shop to get the acid out of the bottle. He submitted that he had proved the high percentage of lead was not in the article supplied by Messrs. Evans. Having done so, that was all that was required of him.

Mr. Kirby urged that if a warranty was not to be held as a defence because the article had been in stock for two

years, which was not at all an unreasonable time having regard to the nature of the article and the public demand for it, the warranty clause as regards retail chemists was going to be of little use, although the Legislature intended that it should be of the utmost use. He suggested that the bottle in which Messrs. Evans supplied Mr. Bentley was not so absolutely chemically clean as it should have been, or that the bin from which the bottle was filled contained some old stock.

The Deputy-Stipendiary said Section 25 of the Act placed on Mr. Bentley the onus, first of all, of proving that he had a warranty, and, secondly, that he sold the article in the same state as when he purchased it. He was perfectly satisfied of the honesty and *bona fides* of Mr. Bentley. He did not think for one moment that this tiny amount of lead was purposely put in the acid by Mr. Bentley. He was quite satisfied Mr. Bentley acted as any honest, straightforward tradesman would do, but he was equally satisfied, on the balance of probabilities, that that minute portion of lead found its way into the bottle during the time the bottle was in Mr. Bentley's possession. In one sense the offence was a technical offence, in another it was a serious offence, and there must be a fine of 40s. and costs.

The costs amounted to 4l. 17s., and although Mr. Kirby protested, the Deputy-Stipendiary allowed them to stand.

BANKRUPTCY REPORT.

Re Richard Bennett Jane (trading as W. Caudery & Co.), 1 Fenchurch Avenue, E.C., Chemical Merchant and Agent.—An application for an order of discharge was made to Mr. Registrar Giffard at the London Bankruptcy Court on November 22. The debtor failed in January 1910, with provable debts 249,770l. and assets likely to produce 21,475l. Mr. E. Leadam Hough, sen., Official Receiver, reported that the business was established in 1847, Mr. Jane becoming a partner in 1886. The failure was attributed mainly to the loss of many thousands of pounds sunk in various businesses outside the scope of the firm's trading. A loss of over 45,000l. was sustained by financing a carpet business in London and Paris, one of 20,000l. by financing the proprietor of another carpet business, and about 7,000l. over a patent for an electrical switch. The moneys put into those businesses and schemes were obtained by W. Caudery & Co. by means of bills received from a firm in Burma, who, if and when they had taken up such bills, would have been creditors of W. Caudery & Co. for upwards of 150,000l. As offences the Senior Official Receiver alleged that the assets were not equal to 10s. in the pound on the amount of the unsecured liabilities, and that the applicant had contributed to the bankruptcy by rash and hazardous speculations. The applicant had stated, and it appeared to be a fact, that the financial part of the business was managed by Mr. Wightman, and that he himself was not fully cognisant of all matters relating to financing outside companies and persons. So far as the Official Receiver could judge, the applicant had a general knowledge of what was going on. The applicant also alleged that he did not become aware of the firm's insolvency until very shortly before the receiving-order, and that he at once suspended payment and incurred no further liabilities. His Honour upheld the report, but was of opinion that there were extenuating circumstances, and granted a discharge subject to the minimum term of two years' suspension.

DEED OF ARRANGEMENT.

Dormer, Isabella Beatrice (married woman), 36 Southgate Road, Islington, **John George Davis**, 33A Lymington Avenue, Wood Green, and **Alfred Henry Hutchins**, 852 Romford Road, Manor Park, E., trading as the Britannia Drug Co., 23 Britannia Street, City Road, London, Druggists' Sundriesmen.—Trustee: A. E. Tilley, 8 Staple Inn, London, C.A. Dated, November 10: filed, November 17. Liabilities unsecured, 478l.; estimated net assets, 128l.

CREDITORS' MEETING.

A MEETING of the creditors of John Henry Blunt, jun., chemist, 4 Abington Street, Northampton, was convened by Messrs. A. C. Palmer & Co., accountants, at Franklin's Hotel, Northampton, on November 17. Mr. A. C. Palmer presided, and presented a statement of affairs, which was as

follows: Total debts, 1,343*l.* 14*s.* 6*d.*; assets, 645*l.* 14*s.* 2*d.*; deficiency, 698*l.* 0*s.* 4*d.* There were unsecured creditors to the value of 732*l.* 6*s.* 6*d.*, and cash creditors 599*l.* The stock-in-trade was estimated to produce 523*l.* 13*s.* and the book debts 30*l.* 10*s.* 1*d.* The estimated value of the shop-fittings was 120*l.* Mr. Palmer said that the creditors had been consulted because Mr. Blunt could not get any further overdraft at the bank or any more money from his friends. There were a great number of creditors for sums less than 10*l.*, and Mr. Blunt did not feel justified in going on further. The debtor attributed his position to loss in trading, but there was a nice little trade done at the shop, and he (Mr. Palmer) considered the business over-weighted with expenses, and he indicated how it might be run with a reduction of 150*l.* to 200*l.* a year in expenses, and would then show a handsome profit. The shop was in an excellent position, and the receipts were very satisfactory. Mr. Palmer suggested that the creditors should confirm an assignment that had been necessitated, and appoint a committee to sell the business as a going concern, with power to give credit for the purchase-money if secured to their satisfaction. A resolution embodying this suggestion was passed.

GAZETTE.

Partnerships Dissolved.

CARR, G. AND G. A., Sheffield, pill and patent-medicine manufacturers and vendors, under the style of George Carr & Co.

PHILLIPS, R. E. G., and MACKENZIE, J. B., Store Street, Bedford Square, London, physicians and surgeons, under the style of Phillips & Mackenzie.

PRIEST, J. D., and JEAFFRESON, D., Sewardstone Road, Waltham Abbey, medical practitioners, under the style of Priest & Jeaffreson.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

YOUNG, ADAM, Hatchlea, Ockley, doctor of medicine.

ADJUDICATIONS.

BURROWS, CHARLES WILLIAM (falsely described as James Joseph O'Donnell), lately The Hawthorns, Hendley, but now of no permanent address, falsely described as a surgeon.

STINTON, EDWARD JAMES and GEORGE (trading as E. J. Stinton & Co.), Lawley Street, Dudley, mineral-water manufacturers.

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

R. BISCHOF & Co., LTD. (P.C.).—Capital 3,000*l.*, in 1*l.* shares. Objects: To take over the business of merchants, exporters and importers of gelatin, gums, and essential oils, carried on by R. H. Bischof as "R. Bischof & Co." at 7 Paper Street, E.C. The first directors are R. H. Bischof (permanent) and J. H. Sterry. Remuneration of R. H. Bischof, 400*l.* per annum. R.O., 7 Paper Street, E.C.

JOHN CLARKE & Co. (SUCCESSORS), LTD. (P.C.).—Registered in Dublin. Capital 2,500*l.*, in 1*l.* shares. Objects: To purchase the business lately belonging to John Clarke & Co., Ltd., at 8 Donegall Square West, Belfast, and to carry on the business of manufacturers of and dealers in anatomical, orthopaedic, and surgical appliances of all kinds. The first subscribers are W. Smyth, 8 Donegall Square West, Belfast, pharmaceutical chemist, and J. D. Gray, 8 Donegall Square West, Belfast, surgical-instrument manufacturer. The first directors are W. Smyth and E. Buckley. Qualification, 100 shares. R.O., 8 Donegall Square West, Belfast.

Company News.

RECEIVERSHIPS.—Corder & Co., Ltd.—Mr. W. H. Brown, 62 John Street, Sunderland, ceased to act as receiver or manager on November 11.—Swansea Oxalic Acid Works, Ltd.—Mr. J. F. Harvey Goat Street, Swansea, ceased to act as receiver or manager on November 14.

ILFORD, LTD.—The directors' report for the year ended October 31, to be presented at the meeting at Winchester House, Old Broad Street, London, E.C., on November 28, states that, after making allowance for depreciation and provision for doubtful debts, the net profit for the year is 35,810*l.* This amount with 4,649*l.* brought forward gives 40,459*l.* for appropriation. A dividend of 6 per cent. has

been paid on the preference shares, absorbing 11,400*l.* The directors also recommend that 12,000*l.* be set aside for writing down goodwill, investments, plant, etc., and that a dividend of 6 per cent. (amounting to 11,400*l.*) be paid on the ordinary-share capital, leaving 5,658*l.* 16*s.* 5*d.* to be carried forward. The articles of association of the company have been rendered obsolete by recent legislation. New articles have been prepared with a view to bringing them into line with existing law and custom, and a special extraordinary general meeting will be held at the termination of the ordinary general meeting for the purpose of considering and, if thought fit, passing the new articles. The new articles make no alteration in the present voting power of the preference or ordinary shareholders. Major F. W. Evatt, who retires from the Board, being eligible, offers himself for re-election.

W. EVERITT, LTD.—A meeting of the creditors was convened last week by the liquidator, Mr. J. B. Ward, solicitor, 6 Eldon Street, E.C., when it was stated that after negotiation in 1907 (see *C. & D.*, 1907, II., 927) various difficulties were experienced in the production of caffeine, and owing to overbuying by the company's agents in India the company soon found itself largely overstocked with raw material—viz., tea waste—to the extent of about 140 tons, costing 2,600*l.* to 2,700*l.* The greatest output of the company was the working of 50 tons of tea waste or fluff in a year. The directors on October 24 last passed a resolution for the winding-up of the company. The liabilities at that date were stated at 714*l.* 14*s.* 4*d.*, and were made up of unsecured trade creditors' claims 341*l.* 9*s.* 5*d.*, cash creditors 10*l.* 18*s.* 1*d.*, interest on debentures to September 30 last 114*l.* 6*s.* 6*d.*, and salaries 248*l.* 0*s.* 4*d.* The assets consisted of cash in hand 20*l.* 6*s.* 10*d.*, book debts 21*l.* 6*s.* 1*d.*, stock-in-trade estimated at 230*l.*, making a total of 321*l.* 12*s.* 11*d.*, and disclosing a deficiency of 393*l.* 1*s.* 5*d.* There is also 107 tons of tea waste. Upon the passing of the resolution for voluntary winding-up the debenture-holders took possession of the works and all the assets, and appointed a receiver (Mr. Taylor), who is now carrying on the business. The liquid assets are insufficient to meet the officers' salaries. It was decided to confirm the liquidator in his appointment.

STUART & Co., CASH CHEMISTS, LTD.—Mr. Cecil Mereer, Official Receiver and liquidator, has issued a statement in regard to the affairs of this company, now in liquidation (*C. & D.*, October 28, index folio 636). The statement shows liabilities of 776*l.* 13*s.* 5*d.* to unsecured creditors, 1,200*l.* (less contra to debenture holder), and preferential creditors 26*l.* 1*s.* 5*d.* The receiver (Mr. Stewart Cole) holds cash, stock-in-trade, fixtures, and lease of 4 The Parade, Watford, which are estimated at 478*l.* 14*s.* 9*d.*, and a surplus from securities is valued at 6*s.* 3*d.*, total 479*l.* 1*s.* After paying the preferential creditors 452*l.* 19*s.* 7*d.* is left, which is the "contra" for the debenture holder, thus showing estimated deficiency of 1,523*l.* 13*s.* 10*d.*, besides 100*l.* paid-up capital. In the course of his statement the liquidator says the company was incorporated on July 29, 1910, with registered office at 4 The Parade, Watford, where it carried on business. The nominal capital is 100*l.*, in 2*s.* shares, seven of which were issued for cash, and the rest as fully or partly paid. The vendor of the company was Mr. John Egbert Griffiths, who agreed to sell the goodwill of his three businesses, Howard & Co., Stuart & Co., and Carr & Co., with leases of premises and all assets, including plant, stock, book debts, etc. The part consideration for sale was 1,299*l.* 6*s.*; stock and plant capable of delivery valued at 1,106*l.* 16*s.*; goodwill, leases, and fittings, 192*l.* 10*s.*; book debts under 500*l.* The consideration was to be satisfied as to 99*l.* 6*s.* by allotment to the vendor of 993 fully-paid 2*s.* shares in the company, and as to 1,200*l.* by issue to the vendor's nominee of 1,200*l.* first mortgage debentures at 6 per cent. per annum. The company undertook to pay and fulfil all liabilities of the vendor and all contracts and engagements, which liabilities, etc., should not exceed 500*l.* The purchase was to be completed on July 30, 1910, and the vendor was to be appointed managing director for three years at 3*l.* per week until the company had redeemed 250*l.* of the debentures. As from the date of the redemption the vendor was to receive 4*l.* per week provided that if the holders of debentures put in force any of their rights under debentures, the vendor's appointment should cease. It was also agreed that the vendor, while acting as managing director, should be entitled to live rent free in the flat, 4 The Parade, Watford, but should pay rates, taxes, and other outgoing. A debenture of 1,200*l.* has been issued to Mr. P. H. Goodwin, of 85 St. Kilda Road, Ealing, W., over the whole of the assets of the company. Soon after the company started the Richmond business was closed, and the stock removed to Watford, and the fixtures sold. The Maidenhead business was sold at the end of June for 300*l.* to Mr. Gerard Atkins, 14 Bartholomew Close, London, E.C. He had acquired debentures for that amount, and the purchase money was paid by cancellation of these debentures. The causes of failure and insolvency are

attributed to "lax management and want of capital." The official receiver is of opinion that it is advisable to make further inquiries as regards the manner of conducting the business of the company. The following are creditors:

J. H. Haywood, Ltd.	£11 0 0
J. E. King	12 0 0
Nitsche & Gunther	10 0 0
P. Goodwin	94 0 0
Sangers	13 0 0
M. Spurway	295 0 0
Spurway & Co.	63 0 0
Surgical Hosiery Co.	16 0 0
W. Sutton & Co.	86 0 0
Weightman Bros., Ltd.	14 0 0
Ashton & Parsons, Ltd.	5 0 0
H. Bradbury	5 0 0
Bruce Green & Co.	7 0 0
Burroughs Wellcome & Co.	5 0 0
British Ring Syndicate	12 0 0
J. & M. Cohen	7 0 0
Coleman & Co., Ltd.	5 0 0
Coleman	5 0 0
E. Cook & Sons, Ltd.	7 0 0
Cooper	5 0 0
Deight & Sons	5 0 0
R. Manson	6 0 0
Newball & Mason	5 0 0
Odol Works	6 0 0
Parke, Davis & Co.	6 0 0
Suttlev & Silverlock, Ltd.	8 0 0
May, Roberts & Co., Ltd.	13 0 0

BIRTHS.

PEEBLES.—At 19 Manor Place, Edinburgh, on November 15, the wife of David Peebles, chemist and druggist, of a daughter.

WATHEN.—At The Pharmacy, Campdale Road, Tufnell Park, London, N., on November 9, the wife of Benjamin Wathen, chemist, of a son.

DEATHS.

ATKINSON.—At 140 Marchmont Road, Edinburgh, on November 14, Ann Dods, wife of Mr. Adam P. Atkinson, and mother of Mr. A. Proctor Atkinson, manager of Messrs. Duncan, Flockhart & Co.'s London branch.

BROWN.—At 12 High Street, Halstead, Essex, on November 3, Henrietta Gaskin, wife of Mr. A. D. Brown, Ph.C., aged fifty-three.

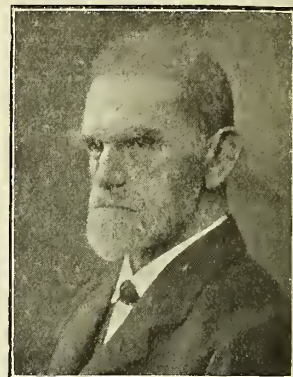
DUNMORE.—On November 8, Mr. Geo. H. Dunmore, chemist and druggist, Downton, near Salisbury, aged seventy. Mr. Dunmore was in business at Downton for thirty years. He was Chairman of the National School Managers and a member of the Diocesan Synod. He served for a long time in the St. George's Volunteer Rifles, being a crack marksman.

FORGIE.—We report elsewhere in this issue the circumstances of the death on November 15 of Mr. William Forgie, chemist and druggist, who for a little over four years had been in business at 246 Crow Road, Partick, Glasgow, after having for many years carried on business at 105 High Street, Falkirk. Mr. Forgie served his apprenticeship with Mr. David Murdoch, Falkirk, and passed the Minor examination in September 1874. He was for some years afterwards one of the staff of Messrs. Frazer & Green, among his contemporaries there being the late Mr. Mathie, Mr. Peter Boa, of Edinburgh, and Mr. Samuel Lawrence, of Oban. Mr. Forgie was a keen business-man and a competent pharmacist. He had been in poor health of recent years, and disposed of his business in Partick in the hope of recovering his former energy. He was unmarried and about sixty years of age.

KIRBY.—At Bristol, on November 7, Mr. Francis Benson Kirby, Ph.C., 128 Ashley Road, Bristol, aged twenty-nine.

HAËN.—On November 15, Herr Geh. Kommerzienrat Dr. Eugen de Haën, senior partner of the Chemische Fabrik "List," Seelze, near Hanover, Germany, aged seventy-five, from heart-failure. Dr. de Haën was one of Germany's leading chemical-manufacturers, and had a

highly interesting career. Commencing business as a manufacturer of pharmaceutical chemicals in a very small way in the village of List, near Hanover, in 1861, he gradually succeeded in building up one of the most important chemical works in Germany, the business now being one of the biggest and best equipped of its kind. Dr. de Haën was not only a first-class chemist, but had the rare gift of discerning and anticipating the requirements of various industries, and he made it a point to supply these wants. Many chemicals now in common use were first manufactured by him on a large scale, these including a wide range of the salts of the heavy metals, such as bismuth, barium, cobalt, lead, mercury, nickel, tin, tungsten, and so on. The manufacture of mineral acids and organic products was also carried on, and during the last few years a special department was devoted to the manufacture of ceramic colours. At the advanced age of sixty-eight Dr. de Haën undertook the difficult task of building a new factory, when the manufacture of other branches of chemical industry were taken up. The firm celebrated its fiftieth anniversary on September 1, 1911, on which occasion a handsomely illustrated brochure was issued setting forth the history and development of the concern. On this occasion Dr. de Haën gave 50,000 marks to the workers' fund. Some forty years ago Dr. de Haën extended the business to this country, since when he has been represented by Messrs. Domeier & Co., 8 Harp Lane, E.C. The business will be carried on by his son, Dr. Wilhelm de Haën.



DR. EUGEN DE HAËN.

JOYCE.—At 92 Eglantine Avenue, Belfast, on November 16, Mr. Henry Joyce, for many years a representative for Messrs. Cantrell & Cochrane, mineral-water manufacturers. He was at one time Chairman of the United Kingdom Commercial Travellers' Association.

OPENSHAW.—Recently, Mr. George Handel Openshaw, chemist and druggist, Euston Road, Morecambe. Mr. Openshaw went to Morecambe as manager of Taylors' Drug Stores in Queen Street. About two years ago he purchased the Euston Road branch in Morecambe of Mr. R. S. Angus, chemist, Lancaster. Mr. Openshaw leaves a widow and two sons and two daughters.

WEBB.—On November 1, at his residence, Chislehurst. Mr. Harry Webb, senior partner of Messrs. Phillips & Webb, 4 Great St. Helens, E.C. Deceased was one of the leading members of the oil and oil-seed trades. He was a regular attendant on 'Change, and his membership of "The Baltic" dated from 1864.

WILLS PROVEN.

MR. GEORGE BENNETT, Ph.C., Abercrombie Street, Chester-ford, who died on September 4, left estate of the gross value of 10,670*l.* 14*s.* 6*d.*, of which 3,103*l.* 13*s.* 8*d.* is net personalty.

MR. JAMES McMURRAY, chemist and druggist, 39 West Clyde Street, Helensburgh, who died on September 22 last, left personal estate in the United Kingdom valued at 2,579*l.* 18*s.* 8*d.*

THE LATE MR. JOHN HARDING, retired physician, Bristol, who carried on business as a chemist at Twerton, near Bath, and afterwards in London before taking his medical degree, left property valued for probate at 5,590*l.*

MR. WILLIAM WRIGHT, 248 Green Lane, Finsbury Park, N., managing director of Messrs. Thomas Hubbuck & Son, Ltd., who died on October 23, left estate of the gross value of 6,670*l.* 16*s.* 1*d.*, of which the net personalty has been sworn at 6,538*l.* 6*s.* 8*d.*

TRADE NOTES.

P.A.T.A. PRICES.—The additions to the Protected List during November are: Atkinson's additional specialties, Bourjois' additional preparations, Le Page's liquid glue, Morgenthau tablets, Ridge's digestive malt extract, Storaxol, Tosa, double carton Kissingen and Vichy varietals.

PITSNO SALT is the name of an effervescent saline with a special action on the kidneys and liver, which is manufactured by Messrs. Snowdon & Co., wholesale druggists, Newcastle-on-Tyne. It is free from sugar and yet affords a pleasant aperient draught. It is put up attractively in bottles to retail at 6d. and 1s.

KALAMAZOO LEDGERS are claimed to possess many advantages over bound ledgers and metal-back loose-leaf ledgers. Messrs. Morland & Impey, Ltd., 62 Coleman Street, London, E.C., offer to send a special booklet about the Kalamazoo ledgers to any of our subscribers who fill in the coupon attached to their advertisement in this issue.

ANTURIC BATH-SALTS.—Messrs. Sangers, 253 Euston Road, London, N.W., have been appointed as from December 1 the sole wholesale agents for Anturic bath-salts. The price of the bath-salts is protected under the scheme of the Proprietary Articles Trade Association. Special window-shows are being arranged.

SPANISH PRICE-LIST.—Messrs. Evans Sons Lescher & Webb, Ltd., Liverpool, and 60 Bartholomew Close, London, E.C., have published a new edition of their Spanish price-list of drugs, druggists' sundries, and counter-adjuncts. It circulates in Spanish-speaking countries, especially South America, and is evidence of the wide extent of the company's business.

TAYLOR'S PERFUMERY.—The J. N. Taylor Perfumery Co., 67 Mortimer Street, Regent Street, London, W., have published a list of the new perfumes and specialties which the company manufacture. Chemists should obtain a copy of this—it is beautifully illustrated—on account of the unique character of the goods offered. The potpourri jars, fumigating-censers, and bronze perfume-stands are distinctive, and will appeal to the best class of customers.

ELECTRICAL NOVELTIES.—A new price-list of these has been published by Messrs. Ward & Goldstone, Sampson Works, Springfield Lane, Salford, Manchester. It comes at an opportune time when chemists are completing their stock of goods suitable for Christmas presents, many of the articles here shown being suitable for this purpose. The list contains a great variety of electrical goods, ranging from toy lamps to gas-engines for driving dynamos.

PHARMACAL MACHINERY.—The F. J. Stokes Machine Co., Philadelphia, Pa., whose sole agents in this country are Messrs. Thompson & Capper, Manesty Buildings, College Lane, Liverpool, have issued a new list. This runs to seventy-two pages, and therein are illustrated a great variety of pharmaceutical and chemical machinery and apparatus. The uses and specifications of these are set forth in detail. Copies of the catalogue will be sent to any chemist interested.

"**COX'S COUNTER COMPANIONS**" is the title of an eight-page circular which is being sent to chemists by Messrs. Arthur H. Cox & Co., Ltd., The Laboratory, Brighton. It deals with some special lines adapted for counter and window display, such as shampoo-powders and other toilet articles, Marienbad anti-obesity tablets, "Swiss mountain pines," dyspepsia remedies, and formalin throat-tablets. Care has been taken to put forward attractive products without enhancing the price.

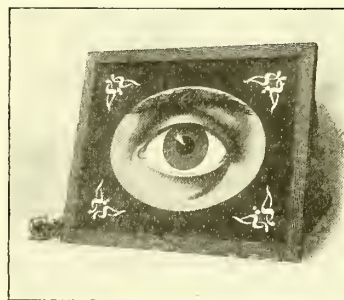
CLARK'S SYPHON STOVES.—At this time of the year thoughts naturally turn to the installation of heating systems. The stoves mentioned above, which are well known to many readers of the *C. & D.*, are particularly adapted for heating pharmacies. Two useful price-lists have recently been issued by Clark's Syphon Stove Co., Ltd., 132 Queen Victoria Street, London, E.C., and should be inquired for by our readers. We understand that some heating tests have recently been made with the stoves,

which bear out in a striking manner the claims of the manufacturers.

"**ALLEN**" PRODUCTS.—Messrs. Stafford Allen & Sons, Ltd., 6 Cowper Street, Finsbury, London, E.C., have issued a further circular, devoted to the leading "points" concerning the manufacture of their extracts and the cultivation of "Allen's" flowers and leaves. The extracts commented on include fucus vesic., gentian, liquorice, henbane, nux vomica, quassia, sarsaparilla, saw palmetto, and taraxacum. The flowers include chamomiles, lavender, and the leaves belladonna, digitalis, and henbane, each drug being dealt with in succinct paragraphs.

"**WARNOL.**"—Since the introduction of this "daily dressing for the scalp and hair" to chemists through our pages, it has grown strikingly in popularity. Mr. Warner Oliver, who originated the preparation, makes no secret of its composition, and informs us that it is based on the ground that one of the most common reasons for disorders of the hair and scalp is bacillary infection, and "Warnol" is designed to keep the scalp in an aseptic condition. The preparation is a most agreeable hair-dressing as well as antiseptic lotion. It is now being well and attractively advertised to the public, and is sold retail at 1s. and 2s. 6d. per bottle. Chemists are offered every encouragement to sell the article, and they can get particulars on application to Warner Oliver, Ltd., 4 Holles Street, Cavendish Square, London, W.

OPTICAL SIGNS.—Messrs. Raphaels, Ltd., manufacturing opticians, 57b and 57c Hatton Garden, London, E.C., have produced a handy flashing-sign which will be useful as an advertisement for an optician. The sign measures 17½ in. by 14½ in., and is of a suitable size for placing in the window. The illustration shows the style of the sign, but any design or wording can be supplied to suit individual requirements.



SANDOW'S COCOA.—The British at home and abroad are a tea-drinking people, with a decreasing taste for coffee and a growing fondness for cocoa, according to the revenue statistics, but whether the fondness is due to increased consumption of chocolate sweetmeats or cocoa as a beverage the statistics do not say. There can be little doubt, however, that the beverage consumption will increase consequent upon the introduction by Messrs. Sandow, Ltd., New Kent Road, London, S.E., of a cocoa which affords to tea-drinkers an alternative beverage, so much desired by many, that does not induce indigestion and consequent headache symptoms which a considerable number of people experience, and which is traced to excess of fatty matters. We need scarcely remind our readers that cocoa beans contain from 48 to 53 per cent. of fat, but part of this is extracted in the production of beverage cocoa, so that from 27 to 31 per cent. remains in the completed article. Mr. Eugen Sandow has carried the extraction further, his object being to get a cocoa with a higher amount of albuminoids and other nutrients as well as one which can be taken by those who are usually upset with cocoa. This cocoa contains only 13 per cent. of fat and 26 per cent. of albuminoids (nearly double the average in beverage cocoas). The extractives are also double the average amount, and the cellulose and lignose about the same (between 5 and 6 per cent.). The process of manufacture is such that the cocoa is in the form of an exceptionally fine powder, the result being a readily "soluble" article, so that practically no sediment is left in the cup. It is altogether a nice beverage, and we are not surprised to learn that it has caught the popular taste in a few weeks. The cocoa is put up in ¼, ½, and 1-lb. tins, and quotations were given in the *C. & D.*, November 18, page 25.

WESTMINSTER WISDOM.

The Week in Parliament.

National Insurance Bill.

In the House of Commons on Thursday, November 16, at 10.30 P.M. the members were considering a new clause dealing with transactions between the Insurance Commissioners and societies. The eighteen clauses which remained were passed and added to the Bill in three minutes. These did not include Mr. Glyn-Jones's motion for local pharmaceutical committees, but it included the following by Mr. Lloyd George :

Local Medical Committee.

Where a local medical committee has been formed for any county or county borough, and the Insurance Commissioners are satisfied that such committee is representative of the duly qualified medical practitioners resident in the county or county borough, they shall recognise such committee; and where a local medical committee has been so recognised it shall, subject to regulations made by the Insurance Commissioners, be consulted by the local Health Committee on all general questions affecting the administration of medical benefit, including the arrangements made with medical practitioners giving attendance and treatment to insured persons, and shall perform such other duties and shall exercise such powers as may be determined by the Insurance Commissioners.

It is unlikely, now that the Government has fixed Tuesday, November 28, for the commencement of the report stage of the Bill, that the second reading will be taken in the House of Lords before December 11. Six days have been set apart for the report stage, and these will be November 28, 29, 30, December 1, 4, and 6. December 7 will be devoted to the third-reading debate. It is unlikely that the House of Lords would proceed with the detailed consideration of the Bill until the date mentioned.

Mr. W. S. Glyn-Jones, M.P., was present on Tuesday evening at a private conference, which took place at the House of Commons, with the members of the Council of the Pharmaceutical Society. It is understood that the question of taking further action on the Report stage of the Bill was discussed. In the meantime, a proposed resolution regarding dispensing by medical men, which is on the agenda for discussion at the Conference of the British Medical Association on Thursday, is viewed with some anxiety.

[The matter referred to is fully dealt with editorially. The meeting which our Parliamentary representative refers to was not of the special committee of pharmacists which interviewed Mr. Lloyd George in June last.—EDITOR *C. & D.*]

As soon as the Committee stage of the Bill was carried on Tuesday evening a number of amendments to the Report stage were tabled. One of these, by Mr. G. Greenwood and Mr. P. Alden, proposes to insert at the end of Clause 15 words designed to provide that research work shall not include experiments under the Cruelty to Animals Act, 1876. Mr. Basil Peto, M.P., also proposes to add at the end of Clause 14 :

"Or by a certified assistant to an apothecary under the Apothecaries Act, 1815, or by a person who for five years immediately preceding the passing of this Act has served as a dispenser to a duly qualified medical practitioner, and can produce certificates of competency from two qualified medical practitioners."

The hon. member also proposes to add :

"(iv.) All persons other than registered pharmacists who are permitted under the preceding sub-section to dispense drugs and medicines shall display prominently a notice stating the nature of their qualification."

It is stated that an attempt will be made on the Report stage of the Bill to secure the concession desired by the unregistered chemist, and which recently formed the subject of a deputation to the Attorney-General.

PATENT MEDICINE LICENCES.—Mr. A. C. Morton, M.P., asked the Chancellor of the Exchequer on Tuesday whether in Clause 14, sub-section 5 (a), page 14 of the Bill, as reprinted, the term "persons, firms, and bodies corporate" will include grocers holding patent-medicine licences and at present selling patent medicines and invalid-foods recommended by doctors.—Mr. McKinnon Wood replied : By the provisions of Clause 14 (5) (iii) the term will only include persons,

firms, or bodies corporate entitled to carry on the business of a chemist and druggist under the provisions of the Poisons and Pharmacy Act, 1908.

MEDICAL BENEFIT (IRELAND).—In the House of Commons on Tuesday Mr. O'Brien asked when the proposed restoration of medical benefit to Ireland, under Clause 59, will be under discussion.—Mr. McKinnon Wood replied that that is not proposed; it was omitted in deference to the wish of the majority of Irish members.—Mr. John Redmond added that nothing had occurred to cause the question to be reopened; nevertheless Mr. O'Brien asked the Prime Minister to arrange that the discussion on Clause 59 should not be guillotined, and Mr. Asquith promised to consult Mr. Lloyd George.

THE SHOPS BILL.

It is stated upon excellent authority (writes our Parliamentary representative) that the chances of the Shops Bill being added to the Statute Book before the prorogation of Parliament next month are now particularly favourable. Mr. R. J. Seddon, a former member for the Newton Division, who has worked hard towards this end, had an interview with the First Lord of the Admiralty in the private room of the Chief Ministerial Whip in the Lobby of the House of Commons on Tuesday afternoon, and there is good reason for believing that the Government will be able to satisfy the wishes of the supporters of the Bill, and grant the three days which are all that is necessary in order to complete the remaining stages of the Bill in the House of Commons. This, of course, can only be possible if the clauses relating to Sunday trading are omitted from the Bill, and this its promoters are prepared to do in order that the time which has already been expended upon the measure both in the House itself and also in Grand Committee may not be wholly thrown away. A memorial signed by seventy members of Parliament was prepared by Mr. Seddon a few days ago, and presented to the Prime Minister, asking that Government facilities might be given for the passage of the Bill during the present Session. Mr. Churchill, although no longer at the Home Office, has, at the request of the Prime Minister, undertaken to pilot the Bill when it again comes before the House of Commons. It has already passed through Grand Committee, and now only awaits the report and third-reading stages in the Lower Chamber; while its passage through the Upper House would not, it is thought, meet with any serious opposition. "The Bill," said Mr. Seddon to our representative, "only affects 25 per cent. of the shop-assistants, but these are literally white slaves!"

[LATER.—Mr. Churchill announced definitely on Wednesday evening that it is the intention of the Government to proceed with the Bill, with a view to its passage through Parliament during the present Session.]

FINANCE BILL.

In the House of Commons on November 16 the Prime Minister declined to say when this Bill will be taken in Committee. It was tenth in the Orders of the day. There are twenty-two pages of amendments and new clauses to be considered, besides the eleven clauses of the Bill itself. In addition to Mr. Glyn-Jones's proposals in regard to rectified-spirit and medicated-wine licences (see *C. & D.*, July 29) several proposals interest the drug-trade—e.g., Mr. Peto proposes to abolish the import-duty on cocoa-butter; several members want veterinary surgeons to get rebate of duty on motor-spirits; others propose proportional payment of duty on licences for "new beginners," who are not at present so treated; it is proposed by Mr. Laurence Hardy and Mr. Wheler that the prohibition of importation of tobacco-extract should be removed, and that licences should be issued to persons "to grow tobacco for the purpose of the use of the extract for the manufacture of insecticides or sheep-dips or other purely agricultural or horticultural purposes," and this free of duty.

THE PATENT-MEDICINE INQUIRY.

Mr. Arthur Lynch, M.P., who last week addressed a series of interrogatories to the Home Secretary in reference to the patent-medicine business and the promised Select Committee of next Session, was interviewed on Monday in the Lobby by the Parliamentary representative of the *C. & D.* Mr. Lynch is a prominent member of the Parliamentary Food Reform Committee, of which Mr.

J. S. Fletcher is Chairman, and which has already been considering the particular matters referred to.

Mr. Lynch said he took his action in regard to patent medicines partly in the interests of the public and partly (a thing which is very necessary nowadays, he remarked) in defence of the professional status of the medical profession. One or two of his friends, who pushed their individualist tendencies to extreme limits, thought that this was an interference with the liberty of the subject; but, looking at the matter from a common-sense point of view, these advertisements of patent medicines were in many cases not business at all—even as authorised business—but sheer swindles. There was behind them no serious preparation of any medicine whatever, and nothing but advertising cheek and a belief in the gullibility of the general public. For instance, under some specious advertisement, some silly servant-girl was induced to buy one of these preparations, with a letter saying that if this was found to be not strong enough the advertiser would supply some "special" medicines which were guaranteed to perform wonders in a few days. Possibly there would be a further relay of a still more expensive medicine described as "extra special," so that in the end the poor girl would discover that she had paid something like a sovereign to no purpose whatever. With cases like these it was absurd to talk about the liberty of the subject. The public required protection, for it was impossible for anyone nowadays to look to these matters. There should be a positive law which would put an end to illegitimate business of this kind. This was bad enough when no harm was done, but the use of illegitimate medicines of a much more dangerous character was common in certain parts of the country. Compounds of lead were extensively used as abortifacients. The harm in these cases did not stop merely with the commission of illegal acts, but continued with lead-poisoning to the subject. Then, again, in these patent medicines there was no guarantee as to the grade of doses, and some medicines in powders might in some cases be found to have five times the actual ingredients of others. He supposed that most medical men could recall instances where they had been called in to see patients who had poisoned themselves with some patent medicines in order to cure a headache, which might arise from twenty different causes, and the medicine indicated in one case would be quite unsuitable for another. The persons who drew up the advertisements—alluring as they might be to the general public—often displayed palpable ignorance, combining together diseases which had no relation to one another, or mis-spelling or mis-quoting medical prescriptions. Some of the favourite medicines contained little more than aloe, pennyroyal, and iron in some form or another. These might be said to do no very great harm, but when it was considered that it was estimated from the stamp-duty the public paid yearly between three and four million pounds for this rubbish the matter became serious. A great deal of this three or four million pounds went to America, and yet after months of effort he had been disappointed in his hopes of obtaining by way of Parliament the sum of 10,000*l.* to keep going one of the finest laboratories for bacteriological research in this country—one of those institutions which raised British science to the highest level of the work which had been done on the Continent. There appeared to be some sort of magic in quackery, so much so, in fact, that he knew of a case in Paris where a quack did such a roaring trade that the street in which he lived was blocked a hundred yards from his house by carriages. In the end the law was set in motion, and as a preliminary, the police officer asked him to produce his diploma. After much hesitation the practitioner did so, and astonished the police officer by producing a very good diploma, perfectly regular in all respects. At the same time he begged the police officer not to give him away, adding that if the public discovered that he was not really a quack they would promptly desert his house.

In regard to the promised Parliamentary Committee, Mr. Lynch said that a very excellent suggestion came from the Association of County Councils in Scotland, whose Executive Committee recommended the Association to pass a resolution of which the important point was

that the name and quality of the drugs should be indicated clearly on the packet, that the label should constitute a warranty, and that the provision of the Food and Drugs Acts should apply to patent medicines. A Parliamentary Committee, under the presidency of Mr. J. S. Fletcher, M.P., is also considering similar subjects and endeavouring to set in motion either legislation or, in some cases, administration, in order to prevent the adulteration of foods or medicines, and incidentally to put a stop to swindling. Mr. McKenna had promised a Select Committee for next Session, and he trusted that the terms of reference would be such that the Committee would be able to accomplish something of real importance with no undue delay. Both the medical and pharmaceutical profession should, of course, be strongly represented on any such Committee.

QUESTIONS AND ANSWERS.

OPIMUM CONFERENCE AT THE HAGUE.—Sir Edward Grey informed Mr. Mitchell Thompson on Thursday that the fourth delegate to the Opium Conference would be Sir William Collins. Sir Edward promised that he would consider the suggestion to appoint a representative of the commercial interests on the British delegation.

THE SUGAR CONVENTION.—Sir E. Grey informed Mr. Lough on Tuesday that unless Russia was permitted to export at least 500,000 tons of sugar westward during the coming season the Government would give notice to cease being a party to the Convention beyond December 1913, and their representatives at the International Sugar Convention would be instructed to that effect.

TRADERS AND PATENTS.—The President of the Board of Trade was asked in the House of Commons on Wednesday whether he was aware that the delay in the granting of registered numbers in the designs branch of the Patent Office is causing considerable loss and inconvenience to traders.—The President of the Board of Trade replied that the registration of designs at the London office had fallen a little into arrear during the last few weeks owing to the illness of one of the officials.

GANJA *v.* OPIMUM.—In the House of Commons on Tuesday, Sir Herbert Roberts, M.P., put a question to the Under-Secretary of State for India regarding the consumption of these drugs and alcohol in India as reported by the Secretary of the Board of Revenue in Eastern Bengal and Assam.—Mr. Montagu replied that the statement referred to was to the effect that the restrictive measures adopted in respect of opium had been accompanied by an increase in the consumption of ganja. It was added that the question of raising the duty on ganja was under consideration. Mr. Montagu, in reply to a further question, said that in Bengal the increase of Excise revenue in 1910-11 was not accompanied by any marked or corresponding increase in the consumption of alcohol, nor of opium. In Eastern Bengal and Assam there was a decrease in the consumption of opium.

IMPORTATION OF METHYLATED SPIRITS.—Mr. Hunt asked the Chancellor of the Exchequer on Tuesday the difference between the Excise duty on alcohol manufactured for industrial purposes in this country and the Customs duty on the same kind of alcohol imported from abroad; and why 3*d.* a gallon was taken off the Excise duty on industrial alcohol manufactured in this country in 1906, but not taken off imported industrial alcohol in the same year.—Mr. McKinnon Wood (the Financial Secretary) replied that no industrial methylated spirits are imported from abroad. Manufacturers of industrial methylated spirits in this country can obtain British spirits free of Excise duty, and foreign spirits on payment of the difference between the duty of Excise chargeable thereon and the duty of Excise chargeable on British spirits. Allowance of 3*d.* per proof gal. was granted in 1906 in respect of all spirits, whether British or imported, used in the manufacture of industrial methylated spirits.

SECRET MEDICINES COMMITTEE.—Mr. Arthur Lynch, M.P., asked the Home Secretary in the House of Commons on Thursday whether the Select Committee to inquire into patent medicines and other allied matters will be appointed as early as possible next Session.—Mr. McKenna stated, in reply, that the Select Committee on patent medicines and other allied matters would be appointed as early next Session as possible.

GREAT BRITAIN'S STAMPED-MEDICINE BILL.—On Thursday a white-paper was issued, in response to a Parliamentary promise, in which it is stated that the duties on these medicines yielded 326,107*l.* to the Imperial Exchequer during the year ending March last. This fact was mentioned in the Board of Customs and Excise report, but M.P.s have this roundabout and expensive way of getting information.

SCIENTIFIC PROGRESS.

Temperatures under this heading are on the Centigrade scale.

The Detection of Turmeric in Rhubarb.—According to Richter, powdered turmeric can rapidly be detected in powdered rhubarb by moistening the powder with a 3-per-cent. solution of boric acid, acidifying with hydrochloric acid, and drying the mixture. The red colour developed in the particles of turmeric can at once, under the microscope, be discriminated from the yellow rhubarb particles.

Candelilla Wax.—James McConnell Sanders ("Proc. Chem. Soc.," No. 390, p. 250) gives the following constants in regard to a sample of dry candelilla wax, prepared last January from plants collected in Coahuila: Melting-point, 67.5°; density, 0.9850; acid-value, 14.39; saponification-value, 46.76; iodine-value (Hübl), 16.60 per cent.; unsaponifiable matter, 77 per cent.; hydrocarbons, 48.60 per cent. The wax was greenish-white in colour, and possessed a granular fracture. It contained a considerable proportion of water. On drying it became dark brown. The wax contained hentriacontane and myricyl alcohol.

A New Antipyrin Compound.—According to Astre and Vidal ("Bull. Soc. Chim.," 1911, 836), a compound of antipyrin with ferric chloride can be obtained by mixing one volume of a 50-per-cent. solution of ferric chloride, two volumes of hydrochloric acid, and two parts by weight of antipyrin, warming the mixture, and allowing it to stand for four days. If the syrupy liquid be evaporated on a water-bath, and the residue washed with ether and allowed to stand over a desiccating agent *in vacuo*, greenish-yellow crystals separate which melt sharply at 121°-122°, and have the formula $(C_{11}H_{11}ON)_2FeCl_2 \cdot 9HCl$.

New Alkaloidal Compounds.—Th. Thomsen ("Journ. Prakt. Chem.," 1911, 410) has prepared a new series of metallic compounds of the alkaloids, which are of considerable use in the characterisation of these bodies, as the percentage of metal is easily determined. They are prepared by dissolving the alkaloids in alcohol and treating the solution with concentrated hydrochloric acid and antimony pentachloride, and are obtained in well-defined crystals. That of quinine has the formula $(C_{20}H_{24}N_2O_8 \cdot SbCl_5 \cdot 2HCl)$; that of morphine, $2C_{17}H_{19}NO_3 \cdot SbCl_5 \cdot 2HCl + 4H_2O$; and that of codeine, $2C_{18}H_{21}NO_3 \cdot SbCl_5 \cdot 2HCl$. Caffeine, cocaine, strychnine, and nicotine also form well-defined crystalline double salts.

Analysis of Turpentine.—A long paper by Ch. Blarez on the analysis of turpentine oil appears in "Annales de Chimie Analytique" (1911, 328). There is not much in the paper that is not already well known, but it contains a series of figures which should be of considerable value to the analyst. Of these, the refractive indices of the various fractions of pure turpentine, and of the same oil containing 5 per cent. of its principal adulterants, are the most interesting. The following are the most valuable of these:

	Original Oil	1st 20%	2nd 20%	3rd 20%	4th 20%	5th 20%
Pure turpentine	1.4729	1.4704	1.4706	1.4711	1.4716	1.4800
+ 5% of Resin spirit	1.4767	1.4708	1.4710	1.4713	1.4722	1.4934
" Benzol	1.4743	1.4748	1.4718	1.4718	1.4720	1.4807
" Petroleum spirit	1.4702	1.4692	1.4690	1.4700	1.4708	1.4793
" "White spirit"	1.4700	1.4649	1.4683	1.4694	1.4703	1.4788
" Burning petroleum	1.4713	1.4688	1.4693	1.4698	1.4708	1.4789

The Estimation of Santonin.—Henrard ("Ann. de Chim. Anal.," 1911, 400) publishes the following method for the determination of santonin in chocolate worm-tablets, etc. Three or four tablets are crushed and treated with a mixture of four parts of chloroform and six parts of ether, and the liquid filtered after careful decantation. The treatment is repeated, and the contents of the flask transferred to the filter, the residue being washed with more chloroform-ether until nothing more is dissolved. The solvent is evaporated, and to the semi-solid residue 20 c.c. of a 5-per-cent. solution of soda and 5 c.c. of alcohol are added. The mixture is heated on a water-bath until saponification is complete. The resulting soap is dissolved in 100 c.c. of warm water and 50 c.c. of brine is added. The liquid is heated until no further separation of soap takes place. On cooling, it is filtered and the soap is squeezed several times with fresh brine. The filtrate is rendered acid with hydrochloric acid and evaporated. The residue is extracted with ether-chloroform, which is filtered, and the insoluble matter well washed with the solvent. The solvent is evaporated and the residue extracted twice with 5 c.c. of alcohol; the alcohol is evaporated and the residue weighed. This residue, which is santoninic acid, multiplied by 0.872 gives the amount of santonin in the tablets.



Postal Address:
C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.
Telegraphic Address: "CHEMICUS LONDON."
Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

- 236/62. "Uritol."
- 232/43. "Ursoloxin."
- 236/64. "Orthophen."
- 233/44. "Satin" soap.
- 230/46. Mercolised wax.
- 241/64. "Hot-a-Kold" flask.
- 241/59. "Lutetia" bandages.
- 240/13. Friga's shampoo-comb.
- 235/72. "Silverbrite" plate-polish.
- 238/36. Woodland fountain syringe.
- 236/53. "Sanol": address of makers.
- 239/1. "Neulise" ladies' shoulder-brace.
- 238/63. Address of the Porter Medicine Co.
- 239/23. Preserved mulberries (in bottles): suppliers.
- 234/3. "Stopit" toothache-cure: address of proprietors.
- 243/18. London address for Van's medicated-air injector.
- 237/57. Address of Seymour, Ellis & Co., makers of a skin-ointment.
- 239/61. "Sacolite" or "Saxolite" (ingredient in a prescription with witch-hazel).

INFORMATION SUPPLIED.

During the past week we have answered inquiries as to where the following articles can be obtained, and in many cases we have given the actual makers. The information will be repeated to any other inquirers who send to this Department a stamped and addressed envelope for the purpose.

- Alligator oil, 237/62
- "Angus" dog-pills, 235/37
- Aniline dyes, 237/30
- Barbadoes tar (importers), 240/16
- Boldoots' perfumes, 239/3
- Camphorodyne, 236/63
- Cashew-nut oil, 238/36
- Charcoal filter-blocks, 239/49
- Collapsible tubes for creams, 237/39
- Davy's diamond cement, 241/65
- Diamond dyes (London agents), 241/14
- Dinnford's flesh-gloves, 240/270
- Dioradin, 236/53
- Dressing-combs, 237/13
- Equinoit, 238/363
- Extract of meat (in bulk), 239/29
- Fibrolysin, 238/362
- "Hakimolo," 232/56
- Helmitol, 237/7
- Javal hair-wash, 235/56
- Lactagol, 236/69
- Laxative bromo-quinine, 240/64
- Letchford's transparent cosmetic, 236/520
- Manola, 235/57
- Macaura blood-circulators, 239/2
- Mattoni's Moorsalz, 240/27
- Nutrose, 238/360
- Omoro phosphated petroleum emulsion, 239/37
- "Pazo" ointment, 240/64
- "Pine Tree" jujubes, 237/7
- Pneumosan, 237/70
- Potassium bichromate, 240/5
- "Rex" ball-bearing casters, 234/62
- Sargol, 236/52
- Sea-tangle rods, 237/16
- Seekamp's lozenges, 240/271
- Shirley's (Elmer) nasal tablets, 237/44
- Smith's "Wonder Worker," 241/300
- Stokes liniment, 241/30
- Tins for camphor ice, etc., 236/17
- Torrey's razor-strops, 234/55
- Trezo tablets, 238/361
- Tru-food, 236/65
- "Venture" razors, 235/370
- Wicker bottles, 237/48

PRACTICAL RESULTS.

From a Manufacturing Chemist:

"Please accept my best thanks for giving the information to Messrs. _____ they desired. They have approached me and done business."—(234/36.)

From a Retail Pharmacist:

"I beg to thank you for your very prompt reply to my query. . . . I have been trying over a week to obtain this without success till it struck me to make use of your Information Department, with such happy results. I hope to make further use of your department in future, which must be a great boon to those who are aware of the knowledge which is at their service."—(238/72.)

OBSERVATIONS & REFLECTIONS.

By Xrayser II.

Coming Events

cast their shadows before, and it is natural that Association meetings should turn their attention to the practical problems likely to be raised by the advent of the Insurance Bill. Some few weeks ago I suggested in this column that pharmacists would do well to devise schemes of pricing and bookkeeping to meet the new requirements, and I am glad to see that Mr. C. A. MacPherson has taken the admonition to heart. The scheme suggested by him is somewhat similar to that under which insurance prescriptions are priced in Germany, and it is possible that some such plan would work out quite fairly all round. It is, however, cumbersome, and something a good deal simpler should be possible. I observe that Mr. Henry stipulates for a dispensing fee of 6*d.* per prescription, whereas Mr. MacPherson's might work out at a penny. There is a big margin between these figures, and I can easily conceive of cases where 6*d.* would be none too large, and where 1*d.* would be quite remunerative. I have been told of cases where hospital dispensers turn out on occasion mixtures at the rate of one each per minute, 200 in three hours being not unusual for one dispenser. This at a dispensing fee of 1*d.* each would be "good biz," but of course such feats could only be possible in dispensaries where nothing but stock mixtures were prescribed, and where the "dispensing" was simply guessing quantities and filling up from the water-tap. Honest pharmacists will never degrade their calling in such way, but all the same there must be a limit to the fees allowed, and I fancy that Mr. Henry is asking a good deal more than he expects to get for insurance work.

The Weight of a Tincture

is frequently much underestimated. It is a common custom of the trade to reckon a pound of tincture as equal to a pint, and the result is that scores of pharmacists divide the pound price by 20 in order to get the fluid oz. price. Thus a tincture that costs 3*s.* 4*d.* per lb. is taken as costing 2*d.* per fluid oz., and a retail price of 4*d.* appears to yield a cent-per-cent. profit. In reality it does nothing of the kind, for no tincture measures a pint to the pound, not even ethereal tincture of lobelia, which only measures 19½ oz. The majority of tinctures measure from 17 to 18 fluid oz. per lb. The assumption, therefore, that liquids with a specific gravity under 0.9 should be reckoned at twenty ounces to the pound in calculating their cost, as Mr. MacPherson suggests, means that in so basing his calculations for all his lighter liquids, the pharmacist stands to lose. On the other hand, he stands to gain in both the other classes, and, as the light liquids are probably in the minority, the scheme suggested by Mr. MacPherson would most likely work out rather to the pharmacist's advantage than would a strict arithmetical calculation for every separate liquid. It is, however, important for pharmacists to remember in general business that it is against their interests to base any calculation on the assumption that tinctures only weigh a pound per pint.

The Golden Rule

"Do as you would be done by" was recently applied by one of your occasional contributors to the chemist's assistant. I venture to apply it to the chemist himself in relation to his assistants. The ideal attitude is, I fancy, more difficult for the employer than for the employed, since his duty is the more complex and the less obvious. *Noblesse oblige*; his superior position lays upon him the initial responsibility of maintaining right relations with those under him. The first essential to this end is that he should treat his assistants as socially on an equality with himself, though they happen to be temporarily in his service. Nobody will question this, and yet in practice it is often forgotten or ignored. A good many men I have known seemed to think courtesy without condescension, or indeed with it, not required in dealing with their assistants, who were treated by them as parts of the machine, or as necessary evils, which had to be conciliated sometimes for business purposes, but were entitled

to no further consideration. Such persons cannot reasonably expect anything better than eye-service in return. The matter is, of course, complicated and the difficulty largely increased

When the Assistant Lives In.

In every case where it is possible an indoor assistant should have not only a bedroom to himself (that goes without saying) but a sitting-room too, in which he is absolutely at liberty to employ himself as he chooses. Endless awkwardness and friction are thus avoided. The hours of business ought always to be stated before engagement, and rigidly adhered to afterwards, and the leisure allowed should be ample for both study and recreation. Temper is often a disturbing element, but it is not so serious a bar to good relations as unreasonableness and want of active kindness. It is a great mistake to demand too much from an assistant, or to let him see that you think him a poor creature. It is also a mistake to make too much of him at first. To begin as you intend to go on, hoping all things, enduring a good many overlooking small faults, and being ready to help without blame for his deficiencies (I am speaking here with particular reference to juniors)—this is the way to call out whatever good there is in a man, and to make him at once an efficient assistant and a possible friend. I have read your report of the meeting of the Chemists' Assistants' Association, at which the unanimous opinion was arrived at that

The Pharmacist is Worse Off

to-day than he was thirty years ago. I wonder whether this dictum also applies to the pharmacist's assistant? I fancy that few of the speakers knew much about conditions thirty years ago, but I know all about them, for when I passed the Minor, not very far from thirty years ago, I was only too thankful to get a crib at 65*l.* a year outdoors. How would a member of the Chemists' Assistants' Association take to a princely salary like that? To-day the modern Minor man often turns up his nose at 120*l.*, and when he does accept it he is just a little bit fastidious. Truly the lot of the pharmacist could hardly help being more difficult if he has to pay 120*l.* a year to assistants whose predecessors were content with half that amount, and who, moreover, were thoroughly competent and willing men. What the C.A.A. requires is clearly a course of Glyn-Jones's addresses on the Insurance Bill, for we read that at Scarborough he turned the pessimists, if not into optimists, at least into brighter men by convincing them that the Bill improves their outlook. I think with Mr. Glyn-Jones, and have thought so all along, and I also think that the pharmacist is every bit as well off as he was thirty years ago, though I admit he has to work harder for what he gets.

The Word "Poison,"

as I had occasion to remark nearly two years ago, has never been quite satisfactorily defined, and it is difficult to see how it can be. It is closely connected with "potion," and has always been used somewhat loosely. To-day it is usually understood to signify a substance capable of destroying life when taken in small quantity, but this is by no means a scientific definition, nor would it serve as a legal one. A legal definition is badly wanted. There are, however, comparatively few substances of which it can be said, as Artemus Ward said of the "noble savidge," that they are "pison wherever met," and to restrict the term to these, or, on the other hand, to give it too wide a scope, would destroy its value. Definition being impracticable, the way we have more or less blundered into of arbitrarily scheduling certain drugs as poisons and giving the schedule legal force was perhaps the best, until it was made nugatory by applying the stronger term "poisonous," meaning literally "full of poison," to things not in the schedule, and allowing virtually anybody to sell them. The force of folly could no further go, and I heartily welcome "Anglo-Parisian's" remarks on the subject. I have carefully scanned your weekly list of poisonings for a good while, and have noticed that if the poison is one that can only be purchased from a chemist, the coroner usually makes some remarks, but not if it has been obtained elsewhere. Why? ~

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LIQUORS

Editorial Articles.

A Medical Revolt.

WITHIN the past ten days the National Insurance Bill has got into stormy water. Mr. Raven Hill's cartoon in this week's "Punch" sums up the situation. Mr. Lloyd George is there represented as the skipper of a motor-launch in a stormy sea. His passengers are a mistress and a maid, an employer and an employé who looks like an outworker. All are sick except the mistress, who looks more angry than sick. The skipper (who is styled "The Pitiless Philanthropist") says:

"Now understand, I've brought you out to do you good, and good I will do you, whether you like it or not."

The trouble began with protests from mistresses who object to lick the stamps that have to be placed on their servants' forms—a trivial enough thing, but it, and the outworker protests during the South Somerset election, may be regarded as the unmasking of the opposition to the Bill which has existed since its introduction, and which, if exerted at the beginning, would certainly have delayed the Bill for a session at least. But the matter which is of greatest interest to chemists in Great Britain is the medical revolt, of which the newspapers are making so much, and which is really the culmination of the scheme which the British Medical Association inaugurated when the Bill was introduced. The branches of the Association have been meeting periodically, and by the end of last week and the beginning of this larger meetings of practitioners (there were 1,100 present at a meeting in Manchester last Saturday) have been held and resolutions passed regarding the Association's six cardinal principles. These led up to a private meeting of two hundred delegates representing the Association held in the Connaught Rooms, Great Queen Street, London, on Thursday, November 23, at 10 A.M., to consider reports of the Council of the Association to the divisions. These reports do not exhibit the hot-headed opposition expressed in reports of the medical meetings; indeed, they (especially the largest report extending to twenty foolscap pages) express a measure of satisfaction with the amendments which have been made on the Bill, without blinking the fact that on certain points, constituting a minor rather than a major quantity, the Council are not satisfied, and the purpose of Thursday's meeting was to get the members' instruction regarding these. The report is one of the latest and sanest documents we have read, and is in remarkable contrast to the bitter and persistent opposition to the medical-benefit provisions which exists even

among the members of the Council of the Association. Perhaps the very calm and sanity of the report is designed to help the medical men to get what they want. This is embodied in thirteen recommendations. We give in full those only which are of direct interest to chemists, and we epitomise the rest:

Recommendation A.—That the Association press for the amendment of Clause 14, Sub-section (4), as follows:

"14 (4). The regulations shall provide that, in the case of persons who are entitled to receive medical attendance and treatment under any system or through any organisation existing at the time of the passing of this Act, and approved by the local Health Committee and the Insurance Commissioners, such medical attendance and treatment may be treated as, or as part of, their medical benefit under this part of this Act, and may provide for the committee contributing towards the expenses thereof the whole or any part of the sums which would be contributed in the case of persons who have made their own arrangements as aforesaid, *so, however, that such regulations shall secure that no person be deprived of his right, if he so elects, of selecting the duly qualified medical practitioner by whom he wishes to be attended and treated in accordance with the foregoing provisions of this section.*"

This is the Harmsworth amendment amended by the addition of the word in italics.

Recommendation B proposes to permit members of the profession attending persons over sixty-five on the same terms as members of Friendly Societies.

Recommendation C.—An amendment to give effect to B.

Recommendation D.—Those who are allowed to make their own arrangements for medical benefit should not be permitted to get it cheaper than local Insurance Committees get it.

Recommendation E.—Six shillings per head per annum is inadequate to meet the cost of medical benefit.

Recommendation F.—Better representation of medical men wanted on all committees.

Recommendation G.—Representation of the profession wanted among Scottish, Irish, and Welsh Insurance Commissioners.

Recommendation H.—That the representative body approve the action of the Council in pressing for amendments of Sub-section (5) of Clause 14 to protect the right of medical practitioners to undertake the provision of drugs and medical appliances for those insured persons whom they attend, provided that the provision of medical attendance and treatment and the provision of drugs and appliances be not made at an inclusive fee.

Recommendation I.—To press the Government for adequate provision for institutional treatment.

Recommendation J.—That the Association press for the restoration of the medical benefits (*sic*) of the National Insurance Bill in the case of Ireland.

Recommendation K.—If medical benefit becomes an additional benefit in Ireland there should be free choice of doctor.

Recommendation L.—Insistence that arrangements with medical men under the Bill should be consistent with the six cardinal principles.

Recommendation M.—That the representative body give preliminary consideration to the question of organisation of the profession for the purpose of protecting its interests under the Insurance Bill, if enacted.

Obviously there is no revolt in these recommendations, but nothing commits the members to work under the Bill, and the Council of the Association are getting practitioners to sign an undertaking that they will not do so, if the Bill is not changed to their satisfaction. Recommendation H is the one which most seriously affects chemists and druggists. It bears upon the amendments which were secured by Mr. Glyn-Jones, acting on behalf of the Pharmaceutical Council's representative committee, especially Sub-section 5, the terms of which we reproduce as they at present stand:

Every such committee shall also make provision for the supply of proper and sufficient drugs and medicines to insured persons, in accordance with regulations made by the Insurance Commissioners, which shall provide for the arrangements made being subject to the approval of the Insurance Commissioners, and being such as to enable insured persons to obtain from any person with whom

arrangements have been made such drugs, medicines, and appliances as may be ordered by the medical practitioner by whom they are attended, and shall require the adoption by every local Health Committee of such a system as will secure—

(a) The preparation and publication of lists of persons, firms, and bodies corporate who have agreed to supply drugs, medicines, and appliances to insured persons whose medical benefit is administered by the committee, according to such scale of prices as may be fixed by the committee;

(b) A right on the part of any properly qualified person who is desirous of being included in any such list as aforesaid, of being so included, except in cases where the Insurance Commissioners after inquiry are satisfied that his inclusion or continuance in such list would be prejudicial to the efficiency of the service:

Provided that—

(i) If the Insurance Commissioners are satisfied that the scale of prices fixed by the committee is reasonable, but that the persons, firms, or bodies corporate included in any list are not such as to secure an adequate and convenient supply of drugs, medicines, and appliances in any area, they may dispense with the necessity of the adoption of such system as aforesaid as respects that area and authorise the committee to make such other arrangements as the Commissioners may approve;

(ii) The regulations shall prohibit an arrangement being made with a medical practitioner under which he is bound or agrees to provide drugs or medicine for any insured person without the consent of the Insurance Commissioners, which consent they shall not give unless the circumstances of any locality are such as to make it expedient to do so;

(iii) Subject to the foregoing provision as to dispensing by a medical practitioner, the regulations shall prohibit arrangements for the supply of drugs and medicines being made with persons other than persons, firms, or bodies corporate entitled to carry on the business of a chemist and druggist under the provisions of the Poisons and Pharmacy Act, 1908, who undertake that all medicines supplied by them to insured persons shall be dispensed either by a registered pharmacist or by a person who, for three years immediately prior to the passing of this Act, has acted as a dispenser to a duly qualified medical practitioner or a public institution.

As to this the Council of the British Medical Association make the following statement:

Provision of Drugs and Appliances, etc.

"In the Bill as originally introduced arrangements for the provision of drugs and appliances were kept separate from those for the provision of medical attendance and treatment by the requirement that a local Insurance Committee should not enter into an arrangement with a medical practitioner to give medical attendance and to supply drugs at an inclusive fee, except with the sanction of the Commissioners in special cases. By the deletion of the words 'at an inclusive fee' the sub-section in question (now Sub-section (5) of Clause 14) has been converted into a prohibition of the supply of drugs by doctors on any terms, except in special cases to be sanctioned by the Insurance Commissioners. These exceptions would, of course, more strongly apply to the more sparsely populated districts. It must be clearly pointed out, moreover, that the restriction only applies to the case of those for whose medical attendance and treatment arrangements are made by the Insurance Committee. There is nothing to prevent those who make their own arrangements for the provision of medical attendance and treatment, including medicines and appliances, from doing so entirely through their own doctors if they wish. In the opinion of the Council the clause should be so amended as not to prohibit medical practitioners from supplying medicines and appliances to their own patients of the insured persons whom they attend, and a recommendation is submitted to the representative body accordingly."

If the doctors persist in this effort to destroy the slight advantage which has been given to chemists and druggists, there can only be one thing for chemists to do, and that is to use every grain of influence that they have in Parliament to checkmate the doctors. So far chemists have responded splendidly to the appeals of the Pharmaceutical Council, who, in consequence of having the help inside the House of Commons of Mr. Glyn-Jones, have had a free field in this matter, and not the slightest opposition to them has been offered from qualified ranks. That peculiar position carries with it correspondingly high responsibility. We report elsewhere that the Parliamentary Watch Committee of the Council have met Mr.

Glyn-Jones and discussed the whole situation, with the result that immediate steps were taken to conserve the interests of chemists, but their individual assistance will be wanted, in fact is wanted all the time.

There is no doubt of the fact that Mr. Lloyd George is averse to changing the principle of Clause 14 as regards medical benefit. So far he has resisted the attempts of medical representatives to allow them to do chemists' work as well as their own; but there is no saying to what extent he might bend to the storm of medical meanness, and it is here where all the influence of the drug-trade in Great Britain should be given to the champions of the chemists' cause. The Report stage begins on Tuesday, November 28, and before our next issue all who have influence with their members of Parliament should use it; and they cannot be wrong in approaching peers, for efforts are also to be made to get from them what the Commons refuse. Some think that the Lords will mutilate or reject the Bill. We have it on excellent authority that this is mere speculation.

Excise Drugs in Bengal.

A REPORT has recently been issued by the Commissioner of Excise and Salt on the administration of the Excise Department in Bengal during the year 1910-11, which gives us some very interesting details concerning the consumption of spirit, ganja (cannabis indica), and opium in India. In round figures, the total receipts from the sale of the above intoxicants amounted to 180 lakhs of rupees, equivalent to 1,199,880/., against 168 lakhs in the preceding year, or an increase of 12 lakhs (78,900/.). The revenue from ganja shows an increase of 3 lakhs (20,000/.), or 10.4 per cent., and of opium more than three-quarters of a lakh, or 3.2 per cent. In other words, there was a net increase of 438 maunds (practically 36,000 lb.) in the quantity of ganja consumed in the Bengal province during the year, whereas the consumption of opium in the province as a whole and in Calcutta remained practically unchanged, while "morphia does not seem to be used as an intoxicant, except to a limited extent in certain towns and districts." Many, however, who are in a position to judge will be inclined to doubt this statement in regard to morphia; and it may be reasonably asked, Why, then, have the Government imposed restrictions from June 1, 1911, on the importation of *all opium preparations*, so that they can only be imported by a favoured few, to the detriment of legitimate business? Would not the Government be better engaged in stamping out the use of ganja, a drug ten times more pernicious than opium? Yet they appear to have driven the native to take ganja instead of spirits, simply because (as they admit in their report) they have raised the taxes on spirits whereby the consumption has considerably decreased. We suggest that the Society for the Suppression of the Opium Trade with China might be induced to devote a portion of its zeal to weaning the native from ganja. No doubt the Government mean well by their actions, but local experience is that they go blundering into action without taking expert advice. For instance, we understand they recently fined a dealer for not declaring 8 oz. of narcotine on the ship's manifest. Narcotine, they were not aware, has no narcotic action whatever, and is used as a quinine substitute for malaria.

Dealing with the trade in cocaine, novocaine, etc., the report states that in spite of numerous prosecutions and the punishments inflicted, the illicit trade in cocaine is still on the increase, but it is extremely difficult to detect and suppress. The Excise Commissioner raises the question whether, in the near future, it will not be necessary to undertake special legislation for its control; but the Board

states that before recourse can be had to special legislation, every possible endeavour will be made to enforce the stringent restrictions provided for in the existing law and rules. After alluding to the energy and ability of the preventive staff, it is stated

that the importance of this work should be brought home to these officers, and they should be reminded that liberal rewards will be given for such detection. But it is a matter of regret to the Board to find that magistrates often fail to realise the absolute futility of inflicting lenient punishments on the offenders they convict. The Excise Commissioner mentions a case in which a Calcutta magistrate imposed only a fine of Rs. 5 for illicit possession of fifty-nine packets of cocaine. The profits made in this illicit trade are enormous, and the Board ventures to suggest to Government that this may be brought to the notice of all magistrates. The Commissioner of Excise and collectors should at the same time issue strict instructions to prosecuting officers to press for severe sentences in such cases, on the ground of the difficulty of stopping illicit practices which yield huge profits.

Is it wise for the Board to publish a statement that enormous profits are to be made out of this illicit trading? Whether it is so or not, we are informed that a large proportion of the cocaine smuggled into India is done at the instigation of Excise spies so as to catch the offenders and secure the reward. The fact that "liberal rewards" are given appears to confirm this statement. It is interesting to note that in Calcutta seven licences for the sale of eucaine and one for the sale of betaeucaine were taken out for the first time during the year. Among the administrative changes which took place during 1910-11 were the following:

(a) The grant to respectable chemists and druggists doing wholesale business in the manufacture of medicines, chemicals, or drugs, of the privileges of obtaining locally manufactured rectified spirit at the reduced rate of duty of Rs. 7-13 per l.p. gal. for their business.

(b) The imposition of Excise restrictions on the manufacture of perfumes and toilet-preparations from or with duty-paid plain foreign spirit.

(c) The introduction of the new method of denaturation of spirits with light caoutchoucine and mineral pyridin bases.

Altogether the report shows that while the Bengal Government is carrying on a vigorous campaign against intoxicating drugs, there is no diminution in consumption. This is, of course, bad for the moral welfare of the native; but has not every nation its vices which are exploited for Revenue purposes?

Poison-licence Regulations.

The King in Council on November 10, at Buckingham Palace, made alterations in the Regulations regarding poison-licences issued pursuant to the Poisons and Pharmacy Act, 1908. The changes are in regard to the provision of schedules for the application, granting, and renewal of licences to bodies corporate, or in Scotland to firms or partnerships; also to assistants. The assistants' licences are only to remain in force while the persons are employed by holders of licences. Regulation 14 has been amended as follows, the words in italics being new:

A poisonous substance shall not be sold except in an enclosed vessel or receptacle as received from the manufacturer, distinctly labelled with the name of the substance and the word "Poison" and with the name and address of the seller *as provided by Section 17 of the Pharmacy Act, 1868, and also with a notice of the special purpose for which it has been prepared. For the purposes of this Regulation the person on whose behalf any sale is made shall be deemed to be the seller.*

The wording of the schedules is also amended—*e.g.*, in place of the declaration "I undertake to comply with the provisions of the Arsenic Act, etc.," are the words "A. B. & Company undertake to be answerable for the due observance of the provisions, etc." These new regulations, which come in force on January 1, 1912, have been rendered necessary in consequence of the decision of the High

Court in the case of Hobbies, Ltd., which was to the effect that bodies corporate can only exercise the powers conferred by poison-licence through an assistant.

The Secret-medicine Inquiry.

Mr. Arthur A. Lynch, M.P., with whom our Parliamentary representative has had an interview in regard to his action about proprietary medicines, is a registered medical practitioner, and studied at Melbourne University and in Berlin, Paris, and at St. Mary's Hospital Medical School, London. He obtained the diplomas M.R.C.S. and L.R.C.P. in 1908. He was a civil engineer before he studied medicine, and is an author and journalist. He was colonel of the Irish Brigade No. II. on the Boer side during the South African War, and has been M.P. for Galway since 1901. We have printed Mr. Lynch's remarks in regard to patent medicines (although in several respects inaccurate) because they reveal in a measure the ideas of those who are agitating this subject in Parliament. Mr. Lynch appears to bring a wide range of products within the term "patent medicine." With his observations in regard to abortifacients and quack-medicines of the disreputable type all right-minding persons will agree, but these form a comparatively small fraction of the medicines from which the Government derives revenue, and, as the Home Secretary remarked to another member of Parliament two weeks ago, there is no suggestion that all patent medicines are worthless concoctions. Extremists like Mr. Lynch seem to be incapable of discrimination when they deal with the subject.

"The Year-book of Pharmacy."

This annual publication of the British Pharmaceutical Conference, to which we referred last week, has now been distributed to the members. In size it is a few pages larger than the previous year's volume. The frontispiece is a portrait of Mr. W. F. Wells, the President at the Portsmouth meeting. The retrospect by the Editor, which was dropped in 1906 to save expense, has been reintroduced. This is followed by the abstracts, divided into sections. Chemistry, which occupies 194 pages, is arranged under the divisions alkaloids, animal-products, colouring matters, essential oils, fats, fixed oils and waxes, glucosides and sugars, gums, oleo-resins and resins, inorganic chemistry, unclassified organic chemistry, and plant analysis. The other sections on materia medica, pharmacy, and notes and formulæ occupy 126 pages, and these are followed by a report of the Proceedings at the Portsmouth Conference, lists of members, etc. The book is a useful one for both practical and theoretical pharmacists, and a set of "Year-books" is recognised as a necessity for those engaged in research work.

Salvarsan Solutions.

Ehrlich in a recent lecture on advances with salvarsan laid stress on the fact that solutions of the compound must be prepared with fresh distilled water (*C. & D.*, October 7, index folio 531). Serious after-effects are stated to have been produced by, or at any rate to have some connection with, distilled water bacterially contaminated. His theory is that the cells of the patient's body become extra susceptible to the action of arsenic under the influence of the dead bacterial bodies, with the result that the "therapia sterilans" process proceeds unsatisfactorily. It is to be noted that this expression emphasises the importance not only of germ-free water, but also water free from dead bacteria. Water absolutely above suspicion can be produced by rejecting the first distillate—indeed, the steam should be allowed to thoroughly blow through the condenser, while the cooling water is cut off before commencing distilling. Every precaution must be taken

to keep dust from receivers, etc. After filling stock bottles the same must then be sterilised by heat. This water will then fulfil Ehrlich's requirements. The "Apotheker Zeitung" (No. 89, 1911, p. 931) rehearses the difficulties of the pharmacist in producing an absolutely sterile injection. So far as salvarsan injections are concerned, all vessels employed should be sterilised by heating at 150° C. in a hot-air chamber or in steam. The saline solution must be above suspicion and germ-free. The mortar must be covered with a large funnel to prevent access of the bacteria falling in the room. The lip of each bottle used, whether it be water or sodium hydrate or saline, should be "burnt off" in bacteriological style. The "Apotheker Zeitung" points out that the manipulation is bound to introduce sources of error, and that the pharmacist has no guarantee either that the salvarsan tube is free from air organisms or that salvarsan has bactericidal action on air organisms. The pharmacist cannot dispense a germ-free injection of a substance that will not stand boiling. All that can be done is to take all possible and reasonable precautions to exclude excess of bacteria.

A New Java Essential Oil.

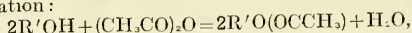
VAN ROMBURGH, at the last meeting of the Koninklijke Akademie van Wetenschappen at Amsterdam, read a lengthy paper on the essential oil of *Litsea odorifera*, an oil distilled in Buitenzorg, Java, and used there for medicinal purposes. The oil is of a yellowish colour, and of nondescript odour. Its specific gravity is from 0.836 to 0.846, and its optical rotation $-3^{\circ} 30'$ to -5° C. The principal portion distils, at ordinary pressure, below 233° C. The oil shows no aldehyde reaction, but contains a ketone which forms a solid crystalline compound with sodium bisulphite, and a crystalline semicarbazone. The portion which does not react with sodium bisulphite forms a crystalline phenyl urethane with phenyl isocyanate. An analysis of the fraction distilling under 233° C. points to the presence of a mixture of bodies of the formula $C_{11}H_{20}O$, $C_{11}H_{22}O$, and $C_{11}H_{24}O$. The ketone was separated from the alcohol by preparing the semicarbazone, melting at 116° C., and decomposing this with sulphuric acid. It is a colourless oil, melting at 12° C., boiling at 234° C., and of specific gravity 0.829 at 17° C. The pure semicarbazone prepared from the ketone thus purified melts at 124° C. The ketone has the formula $C_{11}H_{22}O$, and appears to be identical with the methyl-nonyl ketone (undecanone), which is the principal constituent of the essential oil of *Ruta graveolens*. The alcohols found in this oil are (1) methyl-nonyl carbinol, which is levorotatory, $n_D = -5^{\circ} 40'$, and (2) methyl-nonylene.

Citronella Oil.

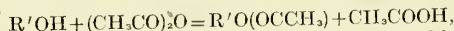
IN the course of a review of Schimmel & Co.'s half-yearly report, "The Perfumery and Essential Oil Record" for November deals with the citronella-oil question (to which reference was made in our issue of November 18, index folio 749) in the following remarks:

Messrs. Schimmel & Co. introduced a very empirical test now known as Schimmel's test for the examination of this oil. The majority of English chemists and users of this oil have recognised the arbitrary nature of this test, and have set themselves the task of establishing the trade in this oil on an honest and scientific basis, by the use of a proper determination of the acetylisable constituents. For obvious reasons Messrs. Schimmel consistently adopt an attitude of hostility to this scientific test—contrary to their usual practice, as in the case, for example, of the ester-value of lavender oil—and welcome any adverse criticism on it, without even fairly examining the value of such criticism. In the present issue they refer to Kleber's note in the *American Perfumer* on this method as a "scathing criticism." Had it been directed against Schimmel's test we should expect to see it

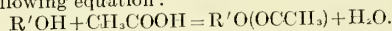
described as an "unnecessary comment." Kleber—and Messrs. Schimmel adopt his view—thinks that no water is formed during the acetylation of geraniol. We had hitherto thought that the reaction took place according to the following equation:



or, using the equation contained in Gildemeister and Hoffmann,



which means that acetic acid is first formed; but this reacts readily with geraniol, so that water is formed as indicated by the following equation:



However, perhaps we are wrong. But we can hardly think that they are serious when they reproduce the remarks of Kleber about dry sodium acetate. In the article they criticise (at the moment this is the one appearing in *THE CHEMIST AND DRUGGIST*, 1910, 896) the use of dry sodium acetate was mentioned. Kleber objects, and says that fused sodium acetate must be used. It is so obvious that anhydrous sodium acetate is meant by dry sodium acetate that it has already been pointed out that the name dry sodium acetate and fused sodium acetate are synonyms, yet Messrs. Schimmel & Co. waste their space to reproduce such a statement as "Kleber expressly recommends the use of fused sodium acetate, on the ground that the ordinary crystalline salt, although it looks dry, in fact contains 3 molecules of water of crystallisation." We have yet to find the sane English chemist who would use crystalline sodium acetate in an acetylation process. It is interesting to notice that Gildemeister and Hoffmann recommend "dry" sodium acetate in the acetylation process (p. 195)! We should be glad of a little evidence that sodium acetate possesses a catalytic action in this process. Further, it is not true that anhydrous sodium bisulphate decomposes the esters formed, at all events not under the conditions of an analysis carried out in practice, although we agree that the neutral sulphate may well be employed here. We have already asked for critics who suggest that it would be easy to adulterate so as to make the geraniol-determination valueless to suggest an alcoholic body which could fulfil the necessary conditions and yet be of the right price to allow its use. No such suggestion is forthcoming, although this remark, which we fancied was dead by this time, is again reproduced for the edification of those who still cling to Schimmel's test. It may be quite true that an occasional sample of citronella oil may have an optical rotation up to -16° , but it is far better to compel that sample—one in a thousand—to be bulked, rather than by admitting the abnormal figure as a standard to open a new and profitable source of adulteration. The "Record" further refers to other topics in the Report, and also criticises references made to the testing of lemon oil, and takes the publishers to task for the attitude towards persons who venture to criticise or differ from their conclusions.

REVIEWS.

The British Pharmaceutical Codex, 1911. An Imperial Dispensatory for the Use of Medical Practitioners and Pharmacists. Published by direction of the Council of the Pharmaceutical Society of Great Britain. 9 in. by $5\frac{1}{2}$ in. Pp. xvi+1568. 10s. 6d. (London: The Pharmaceutical Press.)

A COPY of this work has been submitted to *THE CHEMIST AND DRUGGIST* for review—a courtesy which was not exhibited when the previous edition was published in 1907. We learn from the preface that the preliminary work of revision had so far advanced by January 1910 that the materials were submitted to a committee consisting of six pharmacists, with whom were associated a pharmacologist, a member of the Council, a secretary, and a lady pharmacist. Besides these, acknowledgments are made in the preface to twenty-six individuals who have assisted or co-operated with the immediate revisers. The result of this array of talent is somewhat disappointing, for on comparing the new edition with the old it is found that it is substantially a reprint, with textual and typographical alterations, while the British Pharmacopœia formulas have been suppressed, and other formulas are relegated to the end of the materia-medica section, as was the custom in the days of the London Pharmacopœia and the first edition of the British Pharmacopœia. Some new monographs have been incorporated, and "Preparations" figure at the end of most of the monographs, the paragraphs

under this heading comprising the composition and uses of pharmacopœial and other preparations. Taking a number of the monographs at random, the following observations typify how this edition compares with the 1907 one:

ACIDUM SALICYLICUM.—"It is also official in the U.S.P." added. Impurities omitted. The solubilities brought out in a paragraph beginning "Soluble," and properties other than chemical described under "Actions and Uses," which in part is rewritten. (Such U.S.P. references are now common throughout, and all the solubilities are paragraphed as "Squire" has them.)

ACIDUM SALICYL-SULPHONICUM.—Atomic weight altered from 213.108 to 213.118, otherwise as before. (The atomic weights of other chemicals are brought into line with international changes.)

AMYL ACETAS.—As before, except that a formula is changed and a remark added about essence of jargonelle pear.

AMYL NITRIS.—Boiling-point omitted and actions and uses amplified.

AMYLENI HYDRAS.—Exactly as before, except that the word "exsiccated" is changed to "anhydrous" and methods of administration are given.

CALCI LACTOPHOSPHAS.—Word for word as in 1907, without new facts.

CALCI NAPHTHOL-SULPHONAS.—The footnote in small type about abstralol and asapol brought into the text. (This is done in all cases as far as we can trace.) A note *re* administration is added.

CALCI PEROXIDUM.—As before, except that a remark is added to the old one *re* Calox, saying that magnesium peroxide is preferable to calcium peroxide for tooth-powders.

CHRYSAROBINUM.—Three verbal interpolations, and a reference added to Unna's observations as to oxidising in presence of oleic acid.

CMICIFUGÆ RHIZOMA.—Finnemore's results (1910) added, and colour-test with ferric chloride omitted.

COPAIBA.—Slight changes in actions and uses.

COPAL.—Small footnote brought into the text. No other change.

CORIANDRI FRUCTUS.—The old monograph.

GOSSYPIUM.—Synonyms reduced to one.

OLEUM LIMONIS.—Several factors altered, the old matter rearranged typographically, and two sentences added about essence of lemon.

OLEUM RICINI.—Four factors altered (sp. gr., ref. ind., sop.-value, and iodine-value), and the composition of risicool added.

SODII PEROXIDUM.—Molecular weight changed from 78.1 to 78.0.

SODII PHOSPHAS.—Mention of impurities has been deleted. There are indications that the revision is incomplete; for example, the solubility of gluside in alcohol is still given as 1 in 50, that being the solubility which was formerly given in Squire's "Companion" for the solubility in rectified spirit, B.P. 1885, whereas the solubility in 90-per-cent. alcohol is 1 in 38. The second part of the book consists of the British Pharmaceutical Codex Formulary. In the 1907 edition the quantities in these formulas were given in centesimal terms, which were painful to use in practice; now centesimal quantities and imperial weights and measures are given side by side. In the text the term "mil" is continued. It would have been an advantage to have given the equivalent for this in all cases. In common parlance it is a unit of length in measuring the diameter of wire; in that sense "3 mils of solution of sodium hydroxide" is in the same category as a yard of pea-soup. Fortunately, when the term is used in respect to doses the imperial equivalents are given also. The Formulary consists of most of the recipes included in the 1907 edition (with the exception already noted). In some cases the centesimal quantities are altered so that they may accord with the imperial weights and measures. It is also obvious that changes have been made as the result of experience and experiment, while a number of formulas new to the book are incorporated, some of them being original to it. Reference to "Preparations" shows that due acknowledgment is given there to foreign Pharmacopœias and certain formularies from which the recipes, entitled "B.P.C." in the Formulary, have been taken, but no acknowledgment is given to "Squire," "Martindale," and others whose formulas are also incorporated. Some of the most useful items in this class are from the "Bournemouth Formulary," but this is not mentioned, although the "Glasgow and West of Scotland Formulary" is in the list of abbreviations. Regarded as a whole, the revised work does not "make good" the somewhat pretentious promises which heralded its publication.

Poisons and Pharmacy Act, 1908.

THE following notices appeared in the "London Gazette" of November 17:

At the Court at Buckingham Palace, the 10th day of November, 1911.

PRESENT.

The KING'S Most Excellent Majesty in Council.

WHEREAS by Section 2 of the Poisons and Pharmacy Act, 1908, it is, among other things, enacted that "so much of the Pharmacy Act, 1868, as makes it an offence for any person to sell or keep open shop for the sale of poisons, unless he is a duly registered pharmaceutical chemist or chemist and druggist, and conforms to Regulations made under Section 1 of that Act, shall not apply in the case of poisonous substances to be used exclusively in agriculture or horticulture for the destruction of insects, fungi or bacteria, or as sheep-dips or weed-killers, which are poisonous by reason of their containing arsenic, tobacco or the alkaloids of tobacco, if the person so selling or keeping open shop is duly licensed for the purpose under this section by a local authority, and conforms to any Regulations as to the keeping, transporting, and selling of poisons made under this section, but nothing in this section shall exempt any person so licensed from the requirements of any other provision of the Pharmacy Act, 1868, or of the Arsenic Act, 1851, relating to poisons"; and that "His Majesty may by Order in Council make Regulations as to—

- "(a) the granting of licences under this section; and
- "(b) the duration, renewal, revocation, suspension, extent, and production of such licences; and
- "(c) the keeping, inspection, and copying of registers of licences; and
- "(d) the fees to be charged for licences and for inspection and copying of registers; and
- "(e) the keeping, transporting, and selling of the poisonous substances to which this section applies; and generally for the purposes of carrying this section into effect."

And whereas by an Order in Council dated the 2nd day of April, 1909, certain Regulations were made in pursuance of the said Act.

And whereas it is expedient that additional Regulations should be made in pursuance of the said Act.

And whereas the provisions of Section 1 of the Rules Publication Act, 1893, have been complied with:

Now, therefore, His Majesty, by and with the advice of His Privy Council, doth hereby make the Regulations which are hereunto annexed, and doth hereby order that those Regulations do come into force on the 1st day of January, 1912, and do continue in force until revoked or varied by any Regulations which may hereafter be made under the said recited enactment.

Almeric FitzRoy.

REGULATIONS referred to in the foregoing Order in Council.

Poisons and Pharmacy Act, 1908.

1. Where the applicant for a licence under Section 2 of the Poisons and Pharmacy Act, 1908, is a body corporate, or in Scotland a firm or partnership, the application shall be made in the first form set out in Schedule A to these Regulations, and the forms of licences, applications for the renewal of licences, and renewals of licences, set out in Schedules B, C, and D to the Regulations made under the Order in Council, dated the 2nd April, 1909 (hereinafter referred to as the principal Regulations), shall be adapted accordingly.

2.—(1) Where the applicant for a licence under Section 2 of the Poisons and Pharmacy Act, 1908, is a person in the employment of a person who has obtained a licence under that section, the application shall be made in the second form set out in Schedule A to these Regulations, and the forms of licences, applications for the renewal of licences, and renewals of licences, shall be those set out in Schedules B, C, and D to these Regulations, and the maximum fee charged for the grant of a licence shall be 5s. instead of the maximum fee specified in the principal Regulations, and so much of the principal Regulations as requires an applicant to publish notice of his intention to apply for a licence in two newspapers shall not apply.

(2) A licence granted to such an applicant as aforesaid shall not continue in force after the licence of the person in whose employment he is revoked or while it is suspended.

(3) The following Regulation shall be substituted in place of No. 14 of the principal Regulations:

A poisonous substance shall not be sold except in an enclosed vessel or receptacle as received from the manufacturer, distinctly labelled with the name of the sub-

stance and the word "Poison," and with the name and address of the seller, as provided by Section 17 of the Pharmacy Act, 1868, and also with a notice of the special purpose for which it has been prepared. For the purposes of this Regulation the person on whose behalf any sale is made shall be deemed to be the seller.

SCHEDULE A.

1. *Form of Application for a Licence by a Body Corporate, or in Scotland by a Firm or Partnership.*

THE POISONS AND PHARMACY ACT, 1908.

A. B. and Company, of _____, carrying on the trade of _____ at _____ hereby apply for a licence thereat to sell and keep open shop for the sale of [_____ *being] poisonous substances to which Section 2 of the Poisons and Pharmacy Act, 1908, applies for use exclusively in connection with _____

A. B. and Company undertake to be answerable for the due observance of the provisions of the Arsenic Act, 1851, the Pharmacy Act, 1868, and the Regulations made by Order in Council under the Poisons and Pharmacy Act, 1908.

(Signed)

Date _____

* Here insert the substances in respect of which a licence is applied for. If the application is for a licence to sell and keep open shop for the sale of all the substances to which Section 2 of the Act applies, the words in square brackets will be omitted.

† Here insert either "agriculture" or "horticulture," or "agriculture and horticulture."

2. *Form of Application for a Licence by a Person in the employment of a Person who has obtained a Licence under Section 2 of the Poisons and Pharmacy Act, 1908.*

THE POISONS AND PHARMACY ACT, 1908.

I, _____ being a person in the employment of _____ who is* licensed under Section 2 of the Poisons and Pharmacy Act, 1908, to sell and keep open shop at _____ for the sale of [_____ †being] poisonous substances to which Section 2 of the Poisons and Pharmacy Act, 1908, applies for use exclusively in connection with _____ hereby apply for a licence thereat to sell for such use as aforesaid such poisonous substances as aforesaid.

I undertake to comply with the provisions of the Arsenic Act, 1851, the Pharmacy Act, 1868, and the Regulations made by Order in Council under the Poisons and Pharmacy Act, 1908.

(Signed)

Date _____

* Where the employer is a body corporate, or in Scotland a firm or partnership, the words "a Company" or "a firm" or "a partnership" will be substituted for the words "who is."

† Here insert the substances in respect of which a licence has been obtained by the employer. If the licence obtained by the employer authorises the sale of all the substances to which Section 2 of the Act applies, the words in square brackets will be omitted.

‡ Here insert either "agriculture" or "horticulture," or "agriculture and horticulture."

SCHEDULE B.

Form of Licence to a Person in the employment of a Person who has obtained a Licence under Section 2 of the Poisons and Pharmacy Act, 1908.

THE POISONS AND PHARMACY ACT, 1908.

_____ being a person in the employment of _____ who is* licensed under Section 2 of the Poisons and Pharmacy Act, 1908, to sell and keep open shop at _____ for the sale of [_____ †being] poisonous substances to which Section 2 of the Poisons and Pharmacy Act, 1908, applies for use exclusively in connection with _____ is hereby licensed thereat to sell for such use as aforesaid such poisonous substances as aforesaid, subject to the provisions of the Arsenic Act, 1851, the Pharmacy Act, 1868, and the regulations made by Order in Council under the Poisons and Pharmacy Act, 1908, set out on the back of this licence, § and to such other provisions of those Acts and regulations as may be applicable to the case.

This licence is in force until the _____ day of _____ 19 _____

(Signed)

Clerk to the Council of

Date _____

* Where the employer is a body corporate, or in Scotland a firm or partnership, the words "a Company" or "a firm" or "a partnership" will be substituted for the words "who is."

‡ Here insert the substances in respect of which a licence has been obtained by the employer. If the licence obtained

by the employer authorises the sale of all the substances to which Section 2 of the Act applies, the words in square brackets will be omitted.

† Here insert either "agriculture" or "horticulture," or "agriculture and horticulture."

§ See next page.

The "Gazette" also requires to be printed on the back of the assistants' licences Sections I., II., III., and IV. of the Arsenic Act, 1851, and Section 17 of the Pharmacy Act, 1868. These are given in the "Gazette" notice, together with the necessary form of application and the grant of renewals of poison-licences to assistants.

CHEMICAL SOCIETY.

A MEETING was held at Burlington House, London, W., on Thursday evening, November 16, Professor P. Frankland, F.R.S., in the chair. After the minutes were read, the President made a number of

INTERESTING GENERAL ANNOUNCEMENTS.

The first was that the President and officers of the Society, on behalf of the Fellows, sent an address to the Turin Academy of Sciences when that body celebrated the centenary of the enunciation of Avogadro's hypothesis in September last, and the Academy, in acknowledging the address, has presented the Society with the Avogadro medal struck to commemorate the celebration. A representative international committee has been formed to raise a memorial to the late Professor van t'Hoff. It is proposed to erect a stone in Amsterdam and to found an International Institute for the encouragement of science. Dr. Alexander Scott, of the Davy-Faraday Research Laboratories (Treasurer of this Society), will act as Treasurer for the commemoration fund in this country. A body of French chemists, headed by M. de Laire, is proposing to commemorate the French savant Schutzenberger, and is prepared to receive subscriptions for this purpose. The loyal address presented to H.M. the King by the Society has been duly acknowledged by the Home Office, and the letter of acknowledgment was read. Some of the members laughed when "Winston Churchill" fell from the President's lips.

The President next reminded the Fellows that the Berthelot Memorial Lecture would be delivered by Professor H. B. Dixon, F.R.S., on Thursday, November 23.

The first scientific communication was on a

CHEMICAL EXAMINATION OF CALABAR BEANS.

This was by Dr. Arthur H. Salway, of the Wellcome Chemical Research Laboratories, who had put on the blackboard an epitome of the results of his work, substantially as follows:

Alkaloids:

Physostigmine, $C_{15}H_{23}O_3N_3$, m.p. 86-87° and 105-106°.

Physovenine, $C_{16}H_{25}O_3N_3$, m.p. 123°.

Eseramine, m.p. 245°.

Dihydric Alcohols:

Trifolanol, $C_{27}H_{48}O_2(OH)_2$.

Calabarol, $C_{27}H_{48}O_2(OH)_2$, m.p. 245°.

Glycerides

of palmitic, stearic, behenic, oleic, and linolic acids.

The author explained that the object of the research was to determine the constitution of physostigmine, and it was considered desirable to redetermine the constituents of the bean. Dr. Salway recalled the fact that Dr. Christison took 12 grains of the powdered bean with the result that he suffered toxic symptoms, and narrowly escaped death. Christison's experiments were described to the Royal Society of Edinburgh on February 5, 1855. Jobst and Hesse discovered in 1863 the alkaloid to which the toxic properties are due, and named it physostigmine in the paper which they published early in 1864. A year later the French chemists Vœ and Leven isolated the alkaloid in a crystalline state and named it eserine. Other workers have attacked the drug from time to time since, the most recent being Ehrenberg, who in 1895 described the isolation of eseramine (to which he assigned the formula $C_{16}H_{25}N_4O_3$) and confirmed Elber's description of eseridine, at the same time finally disproving the existence of calabarine. Dr. Salway used 270 lb. of the beans for

the present investigation, and obtained 0.179 per cent. of crystalline physostigmine from it. This was found to melt at 86°-87°, whereas the text-books say that physostigmine melts at 105°-106°. Some of the commercial alkaloid was accordingly obtained, and it agreed in this property with the text-books. A small crystal of the commercial placed in the 86°-87° material had the immediate effect of raising the melting-point of that to 105°-106°, thus showing that physostigmine is dimorphous—a fact not hitherto observed. The presence of eseridine, $C_{15}H_{23}O_3N_3$, m.p. 132°, described by Ehrenberg, could not be proved, but an alkaloid with the formula $C_{14}H_{18}O_3N_3$, m.p. 123°, was isolated in minute quantity, and, being a new compound, was named physovenine. A trace of this in alcoholic solution injected into the eye contracted the pupil to a mere pin-point, and this myotic condition remained for two hours fully. Dr. Salway next called attention to the three dihydric alcohols which have been isolated; calabarol is new, and trifolanol has previously been found in red clover flowers. He also found in the bean a considerable amount of sugar, which yielded *d*-phenylglucosazone (m.p. 205°) and the compounds known as stigmasterol, $C_{30}H_{48}O$, and sitosterol, $C_{27}H_{46}O$. As already stated, eseridine could not be found nor isophysostigmine. In the course of a brief discussion Dr. Veley asked the author how the alkaloidal constituents behave physiologically, he having Christison's experiment in mind. Dr. Power spoke of the use of the drug as the ordeal bean in West Africa, and the President jocularly cautioned Dr. Salway not to experiment too much with his eyes, otherwise he might have no sight left to continue the investigation. Dr. Salway having briefly replied,

Dr. Morgan read for himself and Miss Micklethwaite the second of a series of papers on

ORGANIC DERIVATIVES OF ANTIMONY,

in which it was shown that while the organic derivatives of nitric acid (nitro compounds) must all be derived from ordinary nitric acid, which is a *meta* acid, $HO.NO_2$, the organic derivatives of antimonious acid may be derived from the *meta*, *ortho*, or *pyro* form. Derivatives for all three forms have been obtained, and the special point investigated was the orienting influence of the antimonious acid radicle on new acid-groups introduced into the organic nucleus. It was found that the radicle forces new groups, such as bromine or the nitro-group, into the *meta* position, thus the nitration of the antimony compounds prepared invariably gave rise to *meta*-derivatives. Dr. Pymen contributed the last paper, on

NEW ALKYL-GLYOXALINES.

Using the method of synthesis already described with diaminoacetone as a starting-point, he has prepared β -methyl and β -methyl propyl glyoxalines and the two isomeric N-methyl glyoxalines, but none of these showed such marked physiological action as ethyl-glyoxaline, and it appears to be established that a two-carbon side-chain in this series is correlated with maximum physiological activity.

NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Beard, J. *Enzyme Treatment of Cancer and its Scientific Basis*. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 310. 7s. 6d. net. (Chatto.)

Bidwell, L. A. *Minor Surgery*. $6\frac{1}{2} \times 4\frac{1}{2}$. Pp. 280. 6s. net. (Frowde.)

Clay, R. S. *Treatise on Practical Light*. $8 \times 5\frac{1}{4}$. Pp. 536. 10s. 6d. net. (Macmillan.)

Halliburton, W. D. *Handbook of Physiology*. 10th edit. $8\frac{3}{4} \times 6$. Pp. 946. 15s. net. (Murray.)

Mortimer, J. D. *Anæsthesia and Analgesia*. $6\frac{1}{2} \times 4\frac{3}{4}$. Pp. 286. 6s. net. (Frowde.)

Ogley, D. H. *Elementary Course on Practical Applied Electricity and Magnetism*. $7\frac{3}{4} \times 5$. Pp. 146. 2s. 6d. net. (Longmans.)

Witthaus, R. A. *Manual of Toxicology*. 2nd edit. 8vo. 30s. net. (Baillière.)

WINTER SESSION.

Association Presidents.

In High Street, Margate, one of the quaintest thoroughfares of that favourite seaside



MR. JOHN EASTLAND.

resort, there is at No. 76 a pharmacy with as striking a shop front as is to be seen anywhere, for it is Gothic in design, the business having been established in 1833, when Gothic was all the rage. The business was founded by a pharmacist of the old school, Mr. E. Wootton, whose son, Edward Staple Wootton, was still on the sunny side of thirty when the Pharmacy Act, 1868, passed, and at that time the trading name was E. Wootton & Son. To-day the owner of the business is Mr. John Eastland, (President of the Isle of Thanet Chemists' Association), and he has been associated with No. 76 High Street for more than thirty years. It is thirty-eight years since Mr. Eastland made his first acquaintance with pharmacy—as an errand-boy—and when he was “fired” there was awakened in him an enthusiasm to be the “Governor” which never waned. Friendless and moneyless as he was then, he tackled the problem well, and by hard work prepared himself for the Preliminary examination, which he passed. Then private study for the Minor commenced—but we venture to tell the story as Mr. Eastland does, it may inspire other young men who think their future is hopeless for them: “I next faced the Minor by working all day and studying most of the night. This went on for a few years, culminating in a few months with the inimitable Muter and the realisation of my ambition as a chemist and druggist. During all this time I was first junior and then senior assistant, next partner, and ultimately proprietor of this old-established business.” Mr. Eastland has devoted such spare time as business has afforded him in local ambulance work, for thirty years he has been President or other officer of the local Working-men's Club, and is a Mason. He was Secretary of the Isle of Thanet Association until a month or two ago, and now that he is in the presidential chair he will not do less for his *confrères* than he has done in the past.

Brief Records.

Barnsley Chemists' Association.—The officers elected for the session 1911-12 are: *President*, Mr. D. T. Jones, of Mexborough; and *Secretary*, Mr. Ernest Nash, 2 Queen Street, Barnsley.

Drug-store Proprietors.—The Nottingham and District Branch of the Incorporated Society of Pharmacy and Drug-store Proprietors held a meeting at the Bentinck Hotel on November 14, Mr. A. D. Hutchinson presiding. The report of the London deputation was read and discussed. Applications for membership were received from Newark and Ilkeston.

Ipswich Chemists' Association.—A meeting was held on November 16 at the Great White Horse Hotel. The chair was taken by the Vice-President (Mr. J. C. Wiggin), others present being Messrs. E. S. Clifton, Cornell, G. N. Edwards, J. T. Jackson, Miller, A. Matcham, J. A. Symonds, and the Hon. Secretary (Mr. W. H. Stones). A discussion on the *National Insurance Bill* was opened by Mr. E. S. Clifton, and joined in by all present. A resolution was passed calling upon the Pharmaceutical Society to use its best endeavours to obtain for pharmacists direct representation on the local Health Committees.

Bournemouth Pharmaceutical Association.—A meeting was held at Gervis Hall on November 17, Mr. F. W. Hornby in the chair. There were also present Messrs. Bilson, Reid, Ayre, Botham, Wilkins, Rye, Lodder, Curtis, A. Worth, Scampton, Goddard, and Bingham (Hon. Secretary). The following officers were elected for the ensuing session: *President*, Mr. J. H. Scampton; *Hon. Secretary*, Mr. W. A. Bingham; *Assistant Hon. Secretary*, Mr. C. J. Reid; *Hon. Treasurer*, Mr. T. Boyle; *Committee*, Messrs. Bilson, Haynes, A. Worth, and Lodder.

Oldham Pharmaceutical Association.—On November 14 Mr. E. Walters (of Messrs. Potter & Clarke) read an instructive paper on “The Herbal Side of a Chemist's Busi-

ness.” The lecturer pointed out the great therapeutic value of many of the commonly used botanic remedies, and, while not supporting the extravagant claims of the old writers, he urged that they possessed more value than the average chemist believed. Samples of many of the herbs in regular use in domestic medicine were shown and their special properties briefly discussed. Liquid extracts (1 in 1) he considered to be the most convenient and effective mode of administration. A vote of thanks was accorded to Mr. Walters for his paper.

North Staffordshire Chemists' Association.—A meeting was held at the Roebuck Hotel, Stoke, on November 16, Mr. T. C. Cornwell (President) in the chair. There were also present Messrs. Weston Poole, W. D. Edge, W. H. Kemp, J. R. Blades, H. A. Blades, G. H. Cousins, J. Tirrell, A. Tirrell, Edmund Jones, J. H. Waldron, G. W. Brown, E. S. Insull, E. M. Mellor, S. G. Challinor, and T. Bentley (Hon. Secretary). Mr. W. J. U. Woolcock, of the Pharmaceutical Society, had a conference with the members on the National Insurance Bill. The federation scheme was discussed, and approval of its general principles was expressed, and a unanimous vote pledging the Association to give them its hearty support was passed.

Hull Pharmacists' Association.—A special meeting was held on November 21 at the Grosvenor Hotel. Mr. R. F. Jones (President) was in the chair, and the other members present were Mr. W. Staning (Hon. Secretary), Mr. T. Smith, Mr. Robinson, Mr. Chapman, Mr. Sawyer, Mr. King, Mr. Tiffany, Mr. A. Richardson, Mr. Whitlam, Mr. Wharton, Mr. Snowden, Mr. Newton, Mr. J. F. Robson, Mr. Spillman, and Mr. W. H. Walton. A letter from the Yorkshire Mineral-water Manufacturers' Association on the misuse of aerated-water bottles was read by the Secretary, in which it was stated that the members would not be inclined to place a label on their bottles pointing out the penalty for the improper use of such bottles, as it might have a serious effect upon the trade. A special committee was appointed to deal with the poison question.

South-East Essex Association of Pharmacists.—A meeting of pharmacists in the South-Eastern Division of Essex was held at the Hotel Victoria, Broadway, Southend-on-Sea, on November 21. Among those present were Miss A. Heywood, Messrs. J. H. Heywood, J. P., A. L. Harrington, G. R. Dawson, W. M. Misselbrook, E. A. Holloway, J. G. Cowe, C. E. A. Goode, S. Y. Spouncer, J. S. Nowell, J. L. Angior, and J. King. Mr. A. L. Harrington was in the chair. The Local Associations officer (Mr. Woolcock) attended, and delivered an address on the necessity for a more powerful organisation of the pharmacists in the division. After some discussion, Mr. Holloway proposed, and Mr. Misselbrook seconded, a resolution, which was carried unanimously, “That an Association, to be known as the S.E. Essex Association of Pharmacists, be immediately formed.” Those present formed themselves into a committee, with Mr. E. A. Holloway as Secretary *pro tem*.

Association of Women Pharmacists.—The annual meeting was held at 17 Bloomsbury Square, London, W.C., on November 20. The President (Miss Margaret Buchanan) was in the chair, and among those present were Mr. C. B. Allen, Miss Constance Andrews, Miss Bedell, Mr. R. R. Bennett, Mr. J. O. Braithwaite, Mr. F. W. Gamble, Mr. E. F. Harrison, Mr. F. Naylor, Mr. E. T. Neathercoat, Mr. E. S. Peck, Miss N. Renouf, Mr. E. White, and Miss Wardle (Hon. Secretary). The President, in a brief address, said that the Association includes in its membership about three-fourths of the women practising pharmacy in this country. An inquiry had brought out the fact that in only five cases out of 130 investigated were women receiving less salary than men, and in some cases women are paid more than men. Professor W. E. Dixon then gave a lantern-lecture on “The Relation of the Pharmacist to Therapeutics,” and at the conclusion he was accorded a vote of thanks.

N.U.A.P.—The London members of the National Union of Assistant Pharmacists assembled at the London College, Clapham Road, S.W., on November 19. Mr. G. N. Shelley occupied the chair, in the absence of Mr. H. G. Kirby, owing to the death of his brother. A vote of sympathy with Mr. Kirby was passed in silence. Mr. Victor Bottomley explained the effect of the National Insurance Bill on the condition of the qualified assistant. He related an account of an interview with Treasury officials, in which he had indicated the Union's disapproval of the compromise for dispensing. He showed that the unqualified chemist's assistant was treated more harshly than the unqualified dispenser, although his claim to consideration was at least as good. It was decided to forward a resolution to the Chancellor of the Exchequer urging the Government to reconsider its decision to extend the dispensing under the Insurance Bill to unqualified dispensers, and drawing attention to the dangers of employing imperfectly trained service for such

an important duty. There was also a brief discussion on the Shops Bill.

Chemists' Assistants' Association.—Over thirty members assembled at 73 Newman Street, London, W., on November 16 to hear Mr. F. Pilkington Sergeant, F.C.S., discourse on "The Evolution of a Tincture." The chair was occupied by the President (Mr. F. Naylor). The subject was historical, tracing the changes undergone by the paregoric (tr. camph. co.) of modern times during its evolution, and dealing separately with the history of the drugs entering into its composition. Incidentally the subject dealt with the history of pharmacy generally, and of opium in particular. The lecturer began with Eber's papyrus (1500 B.C.), wherein opium is mentioned, passed on to the Æsculapian temples, Theophrastus, and Mithridates, and the invention of mithridatum, diacodium, philonium, and theriaca. The Arabian physicians were next reviewed, and the introduction of benzoin, camphor, and alcohol mentioned. Mr. Sergeant stated what is known as to the origin of the terms "laudanum" and "paregoric," and their introduction into medicine and the old Pharmacopœias. After a brief discussion Mr. Sergeant was thanked for his interesting paper.

Blackpool Pharmacists' Association.—A meeting was held on November 15 at the Palatine Hotel. The President (Mr. H. P. Withers) was in the chair, and he was supported by Messrs. Sankey, Johnson, Parker, Boothroyd, Laurie, Turver, Watson, Huddart, Blackhurst, O. L. Jackson, Greenwood, Mallalieu, Clarke, and D. J. Bailey (Hon. Secretary). The last named reported that as the result of the postcard canvass *re* early closing, the majority are in favour of closing at 8 P.M. As there are one or two members unable to adhere to this hour, it was finally decided to fix 8.30 P.M. as the closing hour during the winter months (except Christmas, New Year, and Easter weeks) on Mondays, Tuesdays, Thursdays, and Fridays. On Wednesdays the closing time is to be 1 P.M., reopening from 6 to 8 P.M. The President reported that an application had been made by a seedsman in the town for a poison-licence, and Messrs. Boothroyd, Sankey, Turver, and Bailey were appointed as a deputation to meet the Watch Committee when the licence was being considered. The members then adjourned to a "Hot-Pot" supper, on the invitation of the President, to whom a vote of thanks was passed. During the evening musical items were contributed by Messrs. Mayson, Blackhurst, Turver, and Bailey, while Mr. W. S. Parker accompanied. The rendering of "For he's a jolly good fellow" brought the proceedings to a close.

Institute of Ophthalmic Opticians.

A MEETING of the Council was held at the Holborn Restaurant, London, W.C., on November 16, under the chairmanship of Mr. E. K. Spiegelhalter.

BASIS OF MEMBERSHIP.—The principal business discussed consisted of a report by the Membership Basis Committee, which was appointed at a previous meeting to formulate and submit plans for carrying into effect the resolution regarding membership, passed at the annual general meeting. The committee made the following recommendation:

- "That the qualification for Fellowship shall be:
- (1) The holding of the Sight-testing Diploma of the Spectacle-makers Company.
- (2) The holding of the original Fellowship Diploma of the S.M.C.
- (3) The holding of the Fellowship Diploma of the British Optical Association.
- (4) The holding of the Dioptric Diploma of the B.O.A."

The Chairman, in moving the adoption of the report, remarked that personally he did not agree with the remit, but having fought against it and been beaten, he was prepared to fall in loyally with the recommendations of the committee. He thought, however, that some lead should be given the members of the Institute as to the reasons which influenced the committee in submitting the report.—A long discussion ensued, in the course of which various opinions were expressed as to whether or not the doors of the Institute should be opened wider, Mr. G. C. Bateman supporting the report of the committee that many members of the B.O.A. were as qualified as members of that Council. Their admission to fellowship would create a better feeling between the members of the two bodies.—Mr. F. W. Bateman, following in the same line, thought that if the Council were careful as to who and how they admitted to fellowship, the Institute would not only be regarded as the most powerful optical organisation in the country by the medical profession

and the public, but by qualified sight-testing opticians.—Mr. J. Harcombe Cuff (the Hon. Secretary) expressed himself as being rather disappointed with the limited scope of the report. He was certainly of opinion that the doors of the Institute should have been opened still a little wider than had been suggested.—Mr. Beaumont was of the same opinion, and contended that outside the Institute there are many opticians quite qualified for fellowship, not by having passed examinations, but by years of experience. If these men were admitted the Institute would become more influential.—Mr. F. W. Bateman remarked that many who had spent time and money in preparing for and passing examinations in order to become Fellows of the Institute would be very much disappointed and disgusted that opticians who might have been sight-testing for only a year or two would be admitted on equal terms. He agreed with the restriction which the report proposed.—Mr. Houghton thought that legal recognition for the Institute could only be secured by opening its ranks to all sections of the sight-testing profession.—Mr. Upson regarded the members of the Council as members of great experience, knowledge, and wisdom, but he, for one, should not like to sit in judgment on the professional status and ability of a hundred men—say from Lancashire, Yorkshire, or some of the other northern counties. To admit men to the fellowship who were not qualified by having passed either of the examinations mentioned in the report would make the certificate of the Institute valueless and worthless.—Mr. Kidd proposed as an amendment to the report that no alteration be made in the existing conditions of membership.—Mr. Coleman seconded, but on a division the amendment received only two supporters. The report was then adopted.

CLASSES ON EYE DISEASES.—On the suggestion of Mr. F. W. Bateman, it was remitted to a committee to consider the advisability of forming classes for the study of diseases of the eye. In submitting this proposal Mr. Bateman said that the more opticians could distinguish between a healthy and a diseased eye, the better it would be for them and for the oculists to whom they referred patients or customers.

EVENING MEETING.

In the evening a public meeting was held at the Cannon Street Hotel, London, E.C., to hear a lantern lecture by Dr. H. G. Critchley on "The Fundus of the Eye in Health and Disease." The room was completely filled, among those present being Dr. W. Ettles and the following chemists: Mr. Rex Blanchford (Wimbledon), Mr. J. R. Cornish (Tottenham), Mr. J. Harcombe Cuff (Dover), Mr. J. H. Hopper (Crouch End), Mr. J. C. Kidd (Manchester), Mr. A. Upson (Maidenhead), and Mr. S. W. Woolley. Mr. E. K. Spiegelhalter was in the chair, and briefly introduced the lecturer. Dr. Critchley prefaced his lecture by some remarks on the functions of the optician. He said opticians should be able to distinguish between organically normal and abnormal eyes, but whether the diagnosis should be carried further is another question. Personally he would not limit the aspirations of the optician. External diseases are obvious, but there are subtle diseases at the back of the eye which do not cause trouble to the patient until they are well established. It would be a fine accomplishment for the optician to be able to differentiate the normal and abnormal fundus. He did not see why the ophthalmic surgeon and optician do not co-operate more than they do at present. It has been said that the attitude of medical men to opticians is offensive, but this is an erroneous deduction from the expressed opinions of "an infinitesimal fraction of a decimal part of the whole profession." The open shop of the optician will always offer the first opportunity for the public to enter and seek advice on eye troubles. Dr. Critchley also stated that he thought the stereotyped fee of the consultant should be departed from rather than drive the public to the unsatisfactory portals of the out-patients' department of the hospitals. He would like to see a panel of ophthalmic surgeons who would see poorer patients at a small fee. A number of lantern-slides of the fundus were then shown, these including cases of choroiditis, pigmentary degeneration of the retina, albuminuric retinitis, optic neuritis, and

atrophy and embolism of the central artery of the retina. The running comment by the lecturer was much appreciated. At the conclusion of the address Dr. Ettles, seconding the vote of thanks, said that recently an optician detected in one of his customers a case of optic neuritis which had escaped diagnosis by medical men who had been treating the patient for a long time. He considered that opticians should be given every facility to recognise diseases of the eye. Opticians, he added, are most extraordinarily conscientious people, they often send cases to oculists which they need not have done. As to the fears that opticians would infringe upon the functions of the medical men, he (Dr. Ettles) was sure that the Institute would treat such cases with short shrift.

Liverpool Chemists' Association.

AN open meeting of the chemists of Liverpool and district was held at the Royal Institution, Liverpool, on Thursday, November 16, Mr. G. C. V. Last, President, in the chair. The object of the meeting was thus expressed in the card of invitation:

"To give an opportunity for the general discussion of any methods which might be adopted to make the Association thoroughly representative of all sections of the trade, and indispensable to the business pharmacist; also for the consideration of any new features which might be suggested that would add to the interest and increase the attendance at the meetings."

Among those present were Dr. C. Symes, Messrs. T. Ashworth, A. Steen Barr, A. S. Buck, S. Hardy, R. C. Herman, P. Howard, H. Humphreys Jones, W. F. Laycock, P. H. Marsden, G. Nemes, E. Prebble, J. H. Robinson, W. Gilbert Saunders, C. E. J. Sendall, G. R. Tharratt, G. Underwood, W. Wellings, E. G. Welton, B. Whalley, and Harold Wyatt.

The President, in opening the discussion, recalled the fact that during the last two or three sessions open meetings had been held, when members and non-members rubbed shoulders and aired their views upon subjects of general interest or any matter of unusual importance. This has been done, he said, with the idea of bringing men together and inducing them to take a greater interest in pharmaceutical affairs in general, and in the Liverpool Chemists' Association in particular. At the present time new legislation and threatened invasion of the British drug-trade by American concerns are the occasion for the present meeting. Mr. Last was of opinion that the pharmacist is a better business-man than he used to be, and more able to take care of himself, but he is beginning to expect more from trade organisations than formerly, and looks to them for the help and protection which he feels he has a right to expect. Continuing, Mr. Last said:

"As a progressive Association we want as far as possible to be in a position to anticipate the expectations of the business pharmacist. In order to do this satisfactorily we must show that we are in sympathy with all sections of the trade. To gain general support it is not sufficient that we be an active Association, we must be thoroughly representative of our calling locally. We shall then be in a position to fulfil the demands which are likely to be made upon us, and shall be eventually, I hope, an Association to which it will be not only an advantage, but a necessity, to belong. Our finances and membership are now in an exceptionally flourishing condition, and the question naturally arises, Are we making the headway in other directions in keeping abreast of the times and properly fulfilling all the objects of our existence as an Association? If we are not, which I believe is the opinion of some, then now is the time, when our roll of members is at the high-water mark, to take the tide at the flood and endeavour, with your help, to reach as near perfection as a local Association can hope to attain."

Mr. Last concluded by inviting those present to express their opinions freely, and stated that the present membership of the Association is 150.

Mr. H. Wyatt said that the social events in connection with the Association are very well attended, but the ordinary meetings are badly attended. He considered the Association ought to be of value to chemists generally. He instanced a case where a member of the craft during the recent strike had his property damaged and was only compensated to the extent of not more than three-fourths. In such a case the Association ought to have been in a position to be of benefit to that chemist. He also referred to members who had supposed grievances, remarking that

they sat in their seats and said nothing. They should speak up, ventilate their grievances, and state clearly in what manner the meetings, in their opinion, should be conducted. He did not see how the meetings could be made more informal, especially since latterly smoking had been indulged in. It was the duty of chemists to rub shoulders against one another and exchange views and experiences. Proceeding, Mr. Wyatt said:

"You chaps wait for the older members to do the talking. Let us have your views. You seem to mistrust the older members. Remember they have their business grievances and difficulties as well as you. The idea of the Chemists' Association that is prevalent is that it is a clique. One gets up to say something, the other gets up and backs him. I have been an active member of the L.C.A. for many years, and I am willing to take a back seat, and I have no doubt that others share the same feelings. One suggestion is that we should have a fixed syllabus drawn for the session, a few nights being left open for short papers to discuss points that have cropped up since the syllabus was arranged. The Council should have new members. They may infuse new life into the work. At present the members are almost perennial. A term of two years should be served, one to learn and the other to do some work. The Association should not neglect the trade side. It is most important."

Mr. Wyatt added that the work done by the Insurance Bill Committee was most creditable, and if the same spirit always pervaded chemists it would be a good thing. As to a complaint that the work of the Association is carried on secretly, he said that could not be helped, but it would be probably wise to give a summary of the work done in the Council before the ordinary meeting.

Councillor R. C. Herman was struck by these remarks, especially as to the Association being in a thoroughly sound financial condition. "A society or club in that position can do anything," he said. He considered that too many meetings were devoted to scientific discussions. He advocated dinners and to invite the ladies as well: also an occasional dance. He felt that the Association could do a great work if all the chemists could be induced to join—*e.g.*, by procuring better terms in buying, etc. If the working-men can utilise their power of combining for their own benefit, why cannot chemists do the same?

Mr. J. H. Robinson complained that the Association is too aristocratic. When strangers turned in nobody cared or asked who they were. He advocated one secretary to be responsible for all the work, and not two, where there was a shifting of responsibility from one to the other. He complained also that notices of meetings were not delivered early enough, and that there was a lack of punctuality at the meetings. All officials should also be elected by popular vote. The library should have a full complement of up-to-date business books, American drug-journals, etc.

Mr. L. Moreton Parry suggested that a small committee should be formed to consider how best to improve the Association. The rank and file were not represented. He objected to unqualified persons having voting powers. He knew of no other Association in the country where the unqualified were admitted as members.

Mr. Herman objected to these remarks *re* the unqualified, because they are the qualified of to-morrow.

Mr. Steen Barr suggested that a register of rare drugs be kept by the Association, indicating where small supplies could be obtained without having to buy original packages. In that way chemists would be of mutual benefit one to the other, and that would engender good-fellowship.

The discussion was continued by Messrs. Marsden, Laycock, Buck, Welton, and Percy Howard.

A letter was read from Mr. Wallbridge suggesting that the time of meeting should be changed to about 2.30 p.m.

The President briefly answered some of the points brought forward. The proposal to form a committee was duly seconded and carried, and the following were appointed: Messrs. Wyatt, Robinson, Herman, Bain, Parry, Prebble, Laycock, Buck, Last, Lomax, Hardy, Ashworth, Tharratt, Welton, Marsden, and Henry Peet, J.P.

Glasgow Chemists' Association.

THE largest meeting the Association has had for years was held in the Regent Tea-Rooms, Glasgow, on Thursday evening, November 16—Mr. James Lennox, president, in

the chair. He mentioned that as a result of the appeal made to pharmacists outside Greater Glasgow the secretary would read a list of forty-seven new members—(applause)—to be proposed, making with the forty-four proposed at the last meeting, a record in the annals of the Association. He announced that *THE CHEMIST AND DRUGGIST* had presented a copy of the new edition of "Pharmaceutical Formulas" in recognition of assistance given by the Formulary Committee.

DISPENSING CHARGES

Under the National Insurance Bill was the subject which had drawn the meeting, with a paper by Mr. Thomas Guthrie. In the course of his paper Mr. Guthrie gave an excellent and intelligent epitome of the provisions of the Bill, so far as medical benefit is concerned, and especially in regard to the supply of medicines. He also made explicit references to the functions of the Insurance Commissioners, the Advisory and Health Committees, and the authorities to be appointed under the Bill. He pointed out also the directions in which the provisions may detrimentally affect the practice of pharmacy, especially by those who at present have a good dispensing connection with the working-classes. Turning to the question of dispensing charges, he mentioned three plans—i.e., capitation and capitation as regards dispensing fee only, with a charge for material supplied; the Continental plan (fixed prices for drugs and fixed fees for manipulation); and, finally, elaboration and extension of our ordinary dispensing price-lists, with a rebate to Insurance Committees. He considered that capitation—i.e., agreement to supply dispensing, medicines, and such appliances as may be ordered by the medical attendant, on the basis of so much per head per member—is dead. It would be as unjust to chemists, he said, as it would be to doctors to supply the chemists' part of medical benefit at so much per head. Moreover, its adoption would imply a double bargain with the Local Health Committees—prices for drugs would still have to be arranged. Mr. Guthrie proceeded to consider the German and Continental plans, which were fully outlined in the *C. & D.* of May 20. He discussed the conditions which favour such plans, pointing out that these conditions do not, at least in their entirety, obtain in Great Britain. In this connection he said:

"It seems clear to me that in the absence of a universal scale of charges, any attempt to regulate our prices on the Continental system will fail. You will have noticed that three days ago Parliament, that is practically the Chancellor of the Exchequer, arranged to provide Insurance Commissioners specially for Scotland. There may be a ray of hope here. I am not over-sanguine, but it is conceivable that the Central Authority representing the chemists of Scotland, if backed up, might come to a working arrangement with such a body for prices to apply throughout Scotland. Since, therefore, we do not possess the ideal implement (in the absence of anything purely Scottish being attempted) our only course as practical is to make the best use we can of such tools as may lie to our hand. And this brings me to No. 4 of suggested plans, namely, elaboration and extension of existing dispensing price-lists."

Mr. Guthrie next discussed the principle of taking existing local dispensing tariffs, such as the one prepared a few years ago by the Council of this Association, and adding to it an addendum giving rates for bandages, dressings, and the other sundries and appliances likely to be called for by insurance prescriptions, provision also being made for simple stock mixtures, pills, etc., which it is not unlikely may bulk largely in the new order of things, although old prescribing habits may not be easy to shake off. Such a price-list might be taken as a basis of agreement, but, he continued,

"it would be necessary to keep in mind the concessions already made—compulsorily made—in the dispensing price-lists to the general public. And you will remember that I do not doubt that this Insurance dispensing is not something dropping on you from the heavens—an addition to all your other business. It may have that appearance, but in reality to a certain, possibly to a large extent, you are going to be provided with the amusement of changing money from one pocket to another. As the years go on more and more of your clients will come within the scope of the Insurance Act. Condensation from the clouds implies previous evaporation. In the future a man or woman coming into your pharmacy

with an insurance prescription in many instances will merely represent your 'evaporated' liver pill or embrocation customer. While, then, remembering who are the paymasters, it would be the height of unwisdom to demand other than a moderate price for the State work that we are likely to be called upon to do. It will be suicidal folly to offer to perform this work at a 'sweating' figure. In the new order of things, no man or firm will have any inducement to suggest rates lower than the majority of his immediate neighbours consider fair. He cannot, therefore, get a monopoly of the business. Should the service he gives deserve it, he will get a share, not more. His neighbours will remain on the panel."

DISCUSSION.

Mr. J. A. Russell (Greenock) said pharmacists will be looked to to give a lead in preparing a price-list. It will be a mistake to take a list of charges for dispensing such as obtains in a high-class dispensing business, but if chemists make a fair estimate they will receive fair consideration, and with a certain amount of give-and-take a satisfactory conclusion will be arrived at. He noted with satisfaction that there is to be a separate Insurance Commission for Scotland to sit in Edinburgh. Chemists should submit their views after due consideration to the central body. The localities would take a lead from the larger associations. In Greenock the opinion is that a central body should prepare a list with prices in accordance with the prices charged for drugs handled in retail quantities, and in addition a scale of dispensing charges with a fixed minimum to cover the cost of dispensing and establishment charges.

Mr. J. P. Gilmour said by the establishment of a separate Insurance Commission for Scotland the country is going to lose, because on the basis of population the allocation is bound to be less than it would have been had Scotland remained part of the larger body. A third of the population is insurable and on a basis of a population of five millions and an average of sixteen days' illness it would work out somewhere about forty or fifty prescriptions a week for each chemist in business. On the whole chemists will get a little more dispensing. When it comes to prices the difficulty is to estimate until one knows exactly what there is to do. The State has no right to sweat chemists, and their first business is to consolidate, confer, and settle upon the terms it is proposed to ask. A price-list would have to be a sort of sliding-scale on some such system as the German plan or have a dispensing fee. If Mr. Glyn-Jones' amendment to have local pharmacy committees is accepted, chemists would be in a better position.

The President said he had for some time taken careful note of the number of prescriptions and the average price, and even taking into consideration the number of prescriptions the cost of which was considerably augmented by the inclusion of expensive proprietaries, the average charge was about 8d.

Mr. A. McKellar confirmed this, and urged that the great thing is to get away from the word "percentage": it is misleading, and conveys an erroneous impression to the lay mind. Taking the Glasgow price-list, the cost worked out at less than 8d.

Mr. Boyd (Kilmarnock) said at present the prices are based on picked lives, but under the Bill all would be included, the bad lives as well, and this would have to be allowed for.

Mr. Graham estimated that for Glasgow chemists the net profit would be 66l. each, but that is not allowing for the business which will be displaced.

Mr. Mitchell (Dumbarton) said in his town chemists are paid at the rate of 9d. per head.

Mr. Currie pointed out that the Chancellor has set his face against any *per capita* basis.

Mr. J. P. Gilmour said that in Germany 13s. is allowed for medical attendance and medicine, which works out for medicine at 3s. 6d. per head.

Mr. W. L. Currie urged vigilance, as the unregistered drug-companies are seeking to influence the Chancellor.

Mr. A. Russell suggested that if any member of the Association had any definite proposal to make he should write it out and forward it to the Secretary.

SOCIAL GATHERINGS.—Reports of these are printed in the Coloured Supplement.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., November 23.

THERE is no improvement to note in business in the drug-market, but heavy chemicals continue fairly brisk, especially for export, the home trade being rather quiet. Price-changes have been of less significance, and as is the rule on quiet markets, they are more in buyers' favour than have been the case of late. Drugs are, for the most part, inactive, the demand being chiefly for jobbing quantities. Buchu is offered at lower rates on the spot, due to the offers of new crop from the Cape. Ipecacuanha is quiet, pending an important auction of the drug next week. Cod-liver oil is on the easy side, with quotations somewhat nominal. English castor oil for prompt delivery is scarce. Ergot is quiet, but steady. Menthol is steady, but nothing doing to arrive, and various prices quoted on spot. Senega is firm. Lemon oil is quiet, and star anise a shade easier. Orange oil is higher, and bergamot very firm. Opium has shown more activity in Smyrna. In chemicals, benzols are dearer and copper sulphate firmer. Citric and tartaric acids and cream of tartar are all dull markets. Glycerin is unchanged for c. p. Quinine remains firm, with a moderate demand for consumption, and quicksilver is 1s. 6d. cheaper in second-hands. Citrates have been advanced. Shellac at auction was cheaper on forced sales; while isinglass was very strong and dearer at auction. Turpentine is steady. The principal changes have been as under:

Higher	Firmer	Easier	Lower
Balsam Tolu Benzols Citrates Ferri et quin. cit.	Copper sulphate Gamboge Pepper	Ammonia sulphate Anise oil (Star) Cod-liver oil Milk-sugar	Buchu Shellac (at auction) Quicksilver (sec. hands)
Isinglass Orange oil Tragacanth			

Cablegrams.

SMYRNA, November 23.—The sales of opium amount to 100 cases; market is firm at the equivalent of 27s. per lb. for new and 28s. for old extra Karahissar.

NEW YORK, November 23.—Business in drugs is fair. Opium has advanced 25c. to \$8.00 per lb. for druggists'. Peppermint oil has declined 5c. to \$2.85 for tin oil. Cascara sagrada is steady at 9c., and Cartagena ipecacuanha is firm at \$2.30. Senega has advanced 2c. to 60c. Hydrastis is easy at \$5, and copaiba balsam is firmer at 45c. for C. and S. American.

London Markets.

ALOES.—The *Kinfauns Castle* has brought 25 cases from Mossel Bay. 170 boxes Curaçao have also arrived.

BALSAM TOLU is dearer, 2s. 9d. per lb. being asked for either small or large tins. London stock is estimated at 20 cases only.

BENZOLIN.—No arrivals of Sumatra have taken place, and there is nothing now available in first-hands. Small sales

of Siam have been made privately at full rates, and Palembang has changed hands at 90s. per cwt. for second pile.

BENZOLS are dearer at from 1s. 1d. to 1s. 2d. per gallon for 90 per cent., and 1s. to 1s. 1d. for 50 per cent.

BUCHU is lower, with the probability that 4s. per lb. would be accepted for fair greenish round leaf on the spot and slightly less for quantity. The reduction is owing to the fact that offers of the new crop are being made for January-March shipment. It is expected that the new crop will be later than usual.

The "New York Commercial" reports a lower market there, under the influence of weaker primary markets, and the spot quotation is reduced to 90c., while cables solicit orders for forward shipment at 75c. per lb. [We cannot trace a similar price quoted through the London market for new crop.]

The exports from the Union of South Africa during September 1911 amounted to 12,804 lb., valued at 1,537l. against 21,074 lb., valued at 2,151l., during September 1910. For the nine months ending September 1911 the exports have been 190,421 lb., valued at 27,263l., against 243,933 lb., valued at 21,753l., during the corresponding period of 1910.

CARDAMOMS.—Arrivals continue on a very small scale, 24 packages only being imported since our last.

CASCARA SAGRADA.—For some weeks past advices from the Pacific Coast have been of a decidedly bullish character, but the position here is quite unaltered, with spot sellers at 42s. 6d.

CASCARILLA.—The *Atrato* has brought 73 packages from Paíta, and eight packages have also arrived from Callao.

CASSIA OIL.—On the spot sales are retail at 3s. 9d. for 70 to 75 per cent. and 4s. for 80 to 85 per cent.

CASTOR OIL.—As a result of the oil strike Hull make of first pressing for prompt delivery is very scarce. December delivery is offered at 31l. and January-June-1912 at 28l. per ton in barrels, delivered free on wharf London. Belgian of first pressing for November-December delivery is quoted 30l. 10s. per ton for first pressing, ex-wharf London. In Liverpool good seconds Calcutta are quoted at from 3½d. to 4d. per lb. on the spot, and at 3½d. for arrival.

CHIRETTA.—Eleven packages have arrived from Calcutta.

CINCHONA.—The shipments from Java during the first half of November amounted to 830,000 Amst. lb., against 475,000 Amst. lb. in 1910 and 538,000 Amst. lb. in 1909. At the Amsterdam auction to be held on December 7, 11,948 packages will be offered, comprising 10,587 packages Ledgeriana and Hybrid, 586 cases and 775 bales Succirubra. The first-hand stock at Amsterdam, including the above, consisted of 3,920 packages Government and 19,322 packages private bark.

CITRATES.—Prices have been advanced by ½d. per lb., the makers' list-quotation for potassium being 1s. 7½d., and in 28-lb. lots 1s. 6½d. per lb. Sodium citrate is also ½d. dearer, list-price being 1s. 9½d., and 28-lb. lots 1s. 8½d. per lb.

CITRIC ACID.—Very quiet at 1s. 5½d. for English, and 1s. 5d. for foreign.

COCA LEAVES.—At the Amsterdam auction to be held on December 7, 849 packages Java will be offered.

COD-LIVER OIL is quiet, with an easy undertone, and although offers are being made at from 109s. to 110s. per barrel c.i.f., from 112s. 6d. is asked for finest Lofoten quality. Our Bergen correspondent writes on November 20 that the undertone of the market is weak, finest non-congealing Lofoten oil being nominally quoted at 111s. 6d. per barrel c.i.f., with an absence of business.

COLOCYNTH.—Continued activity is noted in pulp, sales of which have been made up to 6½d. per lb. for ordinary quality, better grades being held for 7d. and even more.

COPAIBA is firm with sellers of Maracaibo B.P. at 2s. on the spot; there is a continued scarcity in all markets.

COPPER SULPHATE has advanced a further 5s. per ton to 21l. for ordinary Liverpool brands for prompt delivery, and at from 21l. 5s. to 21l. 10s. for January-May delivery.

CREAM OF TARTAR.—A dull market, but with quotations maintained at the previous rates of 87s. for 98 per cent., and 85s. for 95 per cent. powder.

DRAGON'S-BLOOD.—Practically all the supplies of re-boiled Singapore lump have been cleared, and attention has been paid to the medium and ordinary lump. A small parcel of *reed* has arrived.

ERGOT is steady, but quiet, good sound Spanish offering on the spot at 5s. 3d., and Russian at from 4s. 9d. to 5s. Small arrivals are taking place, the total this week aggregating about twenty bags.

EUCALYPTUS OIL.—The arrivals from Australia comprise 65 cases. A very fair business has been done at between the quoted price of from 1s. 3d. to 1s. 4½d. per lb. for B.P. qualities as to test; Globulus (78 per cent.) is quoted 1s. 6d.

FERRI ET AMMON, CIT. has been advanced ½d. per lb., making the list price 1s. 7½d., and 28 lb. lots 1s. 6½d. per lb.

FERRI ET QUIN, CIT. has been advanced ¼d. per oz., the list price in 25-oz. tins being 4½d. and in 1-oz. vials 5½d. per oz.

GAMBOGE.—Five cases have arrived *via* Havre. With the exception of Siam pickings, for which 10l. 10s. is wanted, nothing is now offered under 12l. for fair pipe.

GLYCERIN.—A meeting of the British Glycerin Convention was held last week, when it was decided to leave the prices of chemically-pure unchanged. Another meeting will be held in December. The official quotation for double-distilled s.g. 1.260 is 109l. per ton in tins and cases and 105l. in drums for five-ton contracts.

GUAIACUM.—A further three casks have arrived.

GUM ACACIA.—Soudan gums are unaltered, with spot sales at from 50s. to 52s. 6d. per cwt. for middling to fair half-hard sorts; for arrival the quotation is 46s. c.i.f. for January-February shipment. Supplies of East Indian gums are still lacking, Aden and Ghatti descriptions being badly wanted.

HONEY.—The *Candidate* has brought 593 cases from San Francisco.

HYDRASTIS is quoted at 21s. 6d. per lb. c.i.f. to arrive, and at 21s. net on the spot.

IPECACUANHA.—The sixty bales of East Indian per *Sunda* will be offered for sale next week. Meanwhile retail sales of Matto Grosso have been made from second-hands at 9s., and for Cartagena 9s. 3d. is still asked.

ISINGLASS.—At auction the bulk of the offerings (425 packages) was sold at generally higher prices. Brazil and West Indian were from 2d. to 3d., Rio 2d. to 4d., Maracaibo 1d. to 2d. per lb. dearer. Penang leaf and Saigon long leaf were much higher.

JALAP is quiet, 10-per-cent. resin offering at 1s. 2d. per lb.

LEMON OIL is quiet and unaltered, prompt shipment offering at 5s. 9d. c.i.f., and new crop for December-March shipment at 4s. 9d. c.i.f.

An advice from Palermo dated November 18 reports that spot oil is entirely neglected, and the small business done was mostly to cover shipment orders, which were filled easily at unchanged rates. New crop still maintains its position, sellers refusing to ease prices so far. On the other hand, local buyers show great interest, but would like some advantage in price. Consumers abroad continue to inquire, and occasionally send orders, but are uncertain as to what course to adopt; for what business has been done full market values have had to be paid; for old crop 5s. 8d., and for new crop, forward shipment, 5s. c.i.f. London is quoted.

MALE FERN OIL.—We call attention to a letter from Messrs. Domeier & Co. in our correspondence columns.

MENTHOL.—Quiet. Prices on spot are somewhat irregular. Kobayashi in very limited quantity is quoted at 27s. 6d. to 28s., and Suzuki at 25s. to 26s. At the close of last week business was done in Suzuki for January-March shipment at 17s. 3d. per lb. c.i.f., at which price there are further sellers. Kobayashi for November-December shipment has been sold at 22s. 6d. c.i.f.; market is inactive this week. Five cases have arrived from Hamburg.

MILK-SUGAR.—The arrivals since our last amount to about 180 packages from the Continent. On the spot business has been done in good quality at from 95s. to 97s. 6d. per cwt.

MUSK.—Tonquin pod continues firm and scarce, last business being at 72s. 6d. per oz. for fine thin blue skin.

ORPIM.—A cable to hand from Smyrna reports sales aggregating 100 cases; market remains very firm, with buyers at 24s. 6d. c.i.f. for 11½ per cent., and on the spot there is practically nothing offering in the open market, the same applying to Persian descriptions. Arrivals aggregating 54 cases have taken place from Turkey.

A Smyrna correspondent writes on November 10 that the sales for the week amount to thirty-five cases as follows: Eighteen old extra Karahissar at 26s. to 26s. 6d., three new fine selected Yerli at 29s. 6d., fourteen old and new current qualities at 22s. to 25s. per lb. The position to-day is very strong owing to the drought, which still continues. Most of our sellers are withdrawing from the market, having received orders from their Interior clients not to sell anything more at present. Our stock of old eligible material is much reduced, many reckoning it to be about 200 to 250 cases; in addition, we have about 200 to 250 cases old common grades and about 300 new crop. The arrivals to date amount to 929 cases, against 3,866 cases at the same period last year.

A review of the month of October states that the sales amount to 259 cases, at from 24s. 9d. to 25s. 3d. for old extra Karahissar and from 23s. 6d. to 24s. 6d. for new qualities. Market closes very firm. The financial crisis was responsible for the above business, as holders were obliged to make the necessary concessions to enable shippers to execute their orders at the limits given them by the consuming markets. Under normal financial conditions the position would have been to-day at least 2s. to 2s. 6d. per lb. higher, especially as stocks are much reduced and the first sowings having failed owing to the drought. The arrivals in Smyrna amount to 865 cases, against 3,724 cases at same date last year, and in Constantinople 1,048, against 3,706. The stock is about 770 cases, against 1,054, and in Constantinople 509, against 1,003.

A further Smyrna advice dated November 11 reports that the past week would have been very active if holders had been willing to sell at the prices quoted last week; but, unfortunately, their reserve, which appears to us to be justifiable, only led to one transaction of twenty-seven cases at 240 piastres, or 26s. 3d. per lb. The market closed firmly, with a rising tendency; arrivals amount to 929 cases, against 3,861 cases at the same date last year. It has to be noted that with the present firmness of prices and the financial condition of our market, whereby the exchange has dropped about 3 per cent., higher prices still may shortly be expected.

ORANGE OIL is dearer, *sweet* offering at 8s. 3d. to 8s. 6d. c.i.f., and *bitter* at the same figures. An advice from Palermo, dated November 18, states that although the demand from abroad has not been particularly active, still the market has rapidly advanced, owing to the increased price for the fresh fruit. In fact the export demand for fresh fruit is brisk, and as a smaller proportion is therefore left for pressing (and even for these higher prices had to be paid), so the price for oil had to be correspondingly advanced; local requirements for prompt shipment also contributed to the advance.

ORRIS.—Mogador is inquired for, but in the absence of arrivals there is no spot stock at the moment.

PEPPERMINT OIL.—The market for American tin oil has been in a neglected condition for several weeks past, and somewhat easier prices have been named, quotations being from 12s. 3d. to 12s. 6d. per lb. as to brand. H.G.H. still maintains its price of 15s. 6d. Japanese dementholised is firm at 7s. 9d. spot for Kobayashi, and at 7s. 6d. c.i.f. for Suzuki; while to arrive 7s. 1½d. c.i.f. has been paid for the latter brand for November-December shipment.

QUICKSILVER.—The chief importer's quotation remains unchanged at 8l. 10s., but the price in second hands has declined 1s. 6d. since our last, closing at 8l. 3s. per bottle.

QUININE remains firm, and a fair quantity has been sold from makers for consumption, including B. and S. and/or Brunswick at 7½d. per oz.; and in second-hands 7½d. is quoted for old German. Amsterdam has been sold at 7½d., and Java at 7d. per oz. and sellers.

The exports of "quinine, quinine salts and combinations" from Germany during the nine months ending September were as follows:

	1909	1910	1911
Kilos. ...	119,300	141,200	152,300

RHUBARB.—Small sales of medium-size round Shensi (High-dried character) of dullish pale pinky fracture have been made at 1s. 9d. Flat High-dried has been sold to arrive at 9½d. per lb. c.i.f. Continent. Canton and Shensi

are not offered for shipment from China, from whence higher prices are asked. Thirty cases have arrived *via* Hamburg.

SARSAPARILLA.—A small parcel of Lima-Jamaica has arrived, but no genuine grey; six bales red native have also come to hand.

SENEGA is firm at 2s. 6d. per lb. net, at which figure business has been done, and for shipment 2s. 6d. to 2s. 7d. c.i.f. is quoted as to holder.

SENNA.—The *Clan Chattan*, from Tuticorin, has brought 421 bales Tinnevely. Advices from Egypt (*via* the United States) state that in addition to the new Alexandrian crop being comparatively small and of inferior quality, there has been a material advance in freight rates by the transportation companies, and also an increase in the export duty by the Egyptian Government. There is a good inquiry for Alexandrian sittings in London, for which 3d. is asked, with buyers slightly under. New crop will be available in January-February.

SHELLAC.—At auction on Tuesday 350 cases offered, and 310 sold without reserve at cheaper rates, good to fine orange being 2s. to 3s. and TN 1s. per cwt. lower. The sales included RLS fine orange, slightly matted to matted, 83s.; fine second palish broken free, 67s. to 68s.; bright curly matted to matted, 67s. to 68s.; dull broken, slightly matted, 63s. to 64s.; TN qualities, fair reddish small free, 62s. to 63s.; bronzy matted to slightly matted, 60s. to 61s.; flat livery, 58s. to 59s. Of *Button*, 10 cases sold at 47s. for common resinous blocky thirds, and for 30 cases *Garnet* 33s. was paid for low dark cakey and blocky. Privately the market has been quiet, spot TN offering at 63s. to 64s., and to arrive at 63s. c.i.f. for January-March and 60s. c.i.f. for AC Garnet. Futures are moderately active with prices practically unaltered on the week, the sales including December 64s., and sellers March 66s. 6d. to 66s., and May 67s. to 68s. to 67s.

SPICES.—At auction *Ginger* was dull, with moderate quantities offered, Jamaica (50 barrels) was bought in at 56s. for small bright but wormy; 843 bags and 63 cases Cochin and Calicut were bought in at 90s. to 95s. for A cut, 77s. 6d. for unassorted, 75s. for C cut, 53s. to 54s. for washed Calicut, 52s. 6d. for brown rough, and 45s. to 50s. for washed Cochin. Of Zanzibar *Cloves* 79 bales sold without reserve at 5½d. to 5¼d. for damp and matted, and 5½d. for slightly damp; six cases Penang also sold without reserve at 10½d. for fair unpicked; fair picked were bought in at 1s. 3d. Privately, Zanzibar on the spot offer at 5½d. to 6d., and for September-November shipment at 4½d., October-December and November-January at 4½d.; for delivery October-December is quoted 5¾d., and January-March 5½d. *Pimento* was not offered at auction; privately, sales are small at 2½d. for fair. The large supply of 411 packages West Indian *Nutmegs* was offered at auction, and practically all sold at steady rates to ½d. to ½d. per lb. higher for defective; of W. I. *Mace* 128 packages realised steady prices, including good pale at 2s. 5d., ordinary to fair 2s. 3d. to 2s. 4d., and red 2s. 2d. Fair red Zanzibar *Chillies* were bought in at 50s. *Capiscums* steady, Nyasaland (30 bags) selling at 60s. for good bold bright off stalk, 47s. to 51s. for fair to good bright, 44s. 6d. for red and yellowish, and 20s. for yellow and perished. *Cassia* (70 bags) bought in at 16s. for broken. *Pepper* (30 bags) sold at 5½d. for fair small Ceylon, and 3¼d. for small light shelly; privately sellers of fair black Singapore quote 5½d., and for arrivals the sales include Singapore for January-March and February-April shipment at 5½d.; no white pepper offered at auction; privately fair Singapore quoted 7½d. for February-April shipment 7½d. to 7¾d. c.i.f. has been paid.

SULPHUR.—The total production of sulphur in Sicily during the first six months of 1911 was 182,678 tons, against 185,825 tons during the corresponding period in 1910. On June 30, 1911, the total stocks of sulphur in Sicily were 527,965 tons, against 586,878 tons at the same date in 1910. The exports of sulphur during the first half-year of 1911 amounted to 287,410 tons, against 240,919 during the first six months of 1910, an increase of 46,491 tons.

TARTARIC ACID is quite inactive, English offering at 1s. 1d. and foreign at 1s. 0¾d. per lb.

TRAGACANTH.—The scarcity of desirable grades renders business difficult for export; for fine seconds business has been done at 17l. 5s. per cwt.

TURPENTINE.—Fluctuations have been quite narrow, American closing at 34s. to 34s. 1½d. for spot, and 34s. 1½d. for December delivery.

Manchester Chemical Market.

November 21.

Heavy chemicals are generally very steady, export demand having a perceptible effect in this direction. On home account the feeling is rather quiet, but prices are fairly maintained. Sulphate of copper has sharply advanced since our last, and latest quotations for prompt delivery are 21l. 7s. 6d. to 21l. 15s. per ton for best brands, delivered Manchester. White powdered arsenic has taken a turn for the better, and may be quoted at from 10l. 15s. to 11l. 5s. per ton here. American grey acetate of lime is unaltered at 10l. 5s. per ton, c.i.f., and brown is quoted 6l. 12s. 6d. per ton. Yellow prussiate is firmer at 4¼d. to 4¾d. per lb. Caustic potash is unaltered; 75° to 80° solid, 19l. 10s. to 19l. 15s., ex store, Manchester. Electrolytic liquid, 50° Bé, 11l. 5s., c.i.f. Goole, and 88° to 90° solid, 22l. to 22l. 10s., f.o.r. Goole-Hull, all net cash. There is a good demand for carbonate of potash; German, 90° to 92°, 16l. 15s. to 17l. 5s., c.i.f. U.K. ports; Russian, 90° to 92°, 15l. 10s. at Hull, 15l. 17s. 6d. Liverpool, and 16l. 5s. f.o.r. Manchester, ready on spot, all net cash. In glycerin there has been something of a revival in English makes, and 80° is selling in retail quantities at 54l. to 55l. per ton; for 1912 moderate quantities can be bought around 50l., and from Marseilles at 47l. to 48l. f.o.b. Distilled qualities remain unchanged; sp. gr. 1.260 pale is quoted 90l. per ton, less 2½ per cent., f.o.r. makers' works. There is no change to report in farina; demand is slow, but values are well maintained both in Germany and Holland, and it appears likely that there will be a further stiff rise as soon as consumers again come into the market. Sellers are holding off, and this is likely to cause buyers to pay heavily in the early future. Superior German on spot is 16s. to 16s. 6d.; November-May, 17s. per cwt., ex store, Manchester; superior Dutch, 14s. 6d. to 15s., f.o.r. Goole-Manchester; seconds, 12s. 6d., f.o.r. Goole, all net cash. There is a better demand for greases; brown bone, 26s. 9d. to 27s. 3d.; white bone, 29s. to 29s. 6d.; marrowfat, 29s. 6d. to 32s.; brown skin, 28s. to 28s. 3d.; white skin, 29s. 9d. to 30s.—all at makers' works or landing-ports, less 2½ per cent. In castor oil, consequent on the continuation of the Hull strike, values have been well maintained for prompt delivery, which is very difficult to obtain; forward positions are very cheap. American cottonseed-soap is quiet; 65 to 68 per cent., in barrels, ready on spot, 14s. to 14s. 6d., f.o.r. Liverpool, net cash; to arrive, 13s. 6d., c.i.f. U.K. ports. Supply is still very short of Italian green olive-oil soap; 56° to 58°, in bars, now due, 21s. 9d. per cwt., c.i.f. Liverpool, net cash, and for shipment, 21s. 3d., same terms. Paraffin wax is firm and scarce; American white scale, 120° to 122° m.p., 1¼d., and 111° to 113° m.p., 1¾d. per lb., c.i.f. English ports. Galician transparent wax, 130° to 131° m.p., in bags, at 1½d., f.o.r. Manchester. Scotch, 118° to 120° m.p. 1¼d., carriage paid, Lancs-Yorks (other grades proportionate), all net cash.

Heavy Chemicals.

Business in the heavy-chemical market is a shade quieter, but the general tone is none the less firmer than it was. Exports, more particularly to northern ports, will now fall off, but this is not likely to affect values at all. Prices generally are on the steady side, and with increasing costs of manufacture are likely to so continue.

SULPHATE OF AMMONIA.—This market is quietly steady, and buyers seem to be holding off awaiting lower prices. There is, however, a fair demand for prompt parcels. Present nearest figures: Beckton, prompt, 25 per cent. ammonia guaranteed, 13l. 17s. 6d.; London terms, 13l. 12s. 6d.; Leith, 14l. 7s. 6d.; Liverpool, 14l. 5s. to 14l. 7s. 6d.; and Hull, 14l. 3s. 9d. to 14l. 5s.

ALKALI PRODUCE.—There is a fair average demand for main and miscellaneous products on prompt and forward account, and quotations rule steady at practically unaltered rates. Bleaching-powder, prompt, 4l. 15s. to 5l. for softwood casks on rails. Caustic soda, home trade, 76 to 77 per cent., 10l. 7s. 6d.; 70 per cent., 9l. 12s. 6d.; and 60 per cent., 8l. 12s. 6d., with exports figures 7s. 6d. per ton less. Chlorates 3½d. to 3¾d., prussiates 4½d. and 3d. Salteake 42s. 6d. Soda crystals, 52s. 6d. to 57s. 6d. in bags on rails.

BENZOLS are very scarce for prompt, and prices nominal. Naked prices: London, 90 per cent., 11d., and 50 per cent., 9½d., 10½d. to 11d. and 9d. respectively.

LEAD PRODUCTS are very firm, and brisk business has been done at advanced figures. White lead 21l. 10s. and red

lead 18 $\frac{1}{2}$ 10s. per ton Tyne; white acetate of lead 24 $\frac{1}{2}$ 15s. to 25 $\frac{1}{2}$., and brown acetate of lead 21 $\frac{1}{2}$ 5s. to 21 $\frac{1}{2}$ 10s.; nitrate of lead 25 $\frac{1}{2}$ 10s. to 26 $\frac{1}{2}$., all per ton, less 2 $\frac{1}{2}$ per cent.

Continental Drug and Chemical Markets.

CARBOLIC ACID.—There is a decided upward tendency in crystals, and as the demand has attained considerable importance makers have some difficulty in keeping pace. This refers not only to home but foreign products, and it is only possible to purchase at high prices.

ERGOT.—From Hamburg the market is reported steady, with small sales of Spanish at m.11 and German at m.10.75 per kilo. ex warehouse.

GLYCERIN.—Latest reports from Marseilles state that growing interest has been taken in the market, and that several hundred tons of saponification qualities have been absorbed at fr.150 for delivery next year. There are now inquiries at fr.152, but sellers are very independent, in the hope of realising at least fr.155; yet it is meanwhile quite possible that prices may react should the demand for near delivery not be well sustained, but even then it is inferred that sellers will hardly alter their views. The following rates would have to be given in order to permit of business for delivery next year and in 1913, and only limited quantities could be secured thereat: Saponification glycerin (at least 80 per cent., delivery 1912, fr.152.50 to fr.155; delivery, 1913, fr.140 to fr.145; glycerin from the lye (80 per cent.), delivery 1912, fr.115 to fr.117.50; delivery 1913, fr.107.50 to fr.110. These prices are understood for 100 kilos, unpacked in buyers' packages, f.o.b. to suitable European ports for quantities not under 10,000 kilos. for saponification material, with 3 $\frac{1}{2}$ per cent. discount, and for glycerin from the lye (80 per cent.) net with $\frac{1}{2}$ per cent. discount.

IPCACUANHA.—Cartagena is scarce and costs m.19.50 to m.19.75 per kilo. Rio is only offered in small quantities at m.19.50 to m.19.75 per kilo.

LYCOPodium.—The demand on the Hamburg market has diminished with a steady market. Cases are quoted at m.4 and bags at m.3.90 per kilo. net cash ex warehouse.

SANDARAC.—The better qualities of gum are now scarcer, and values of current qualities have advanced from 10 to 15 per cent.

Port of London.

The second annual report of the Port of London Authority shows that in volume and value the trade of the Port was the highest on record. The net tonnage of vessels entering and leaving was 39,473,001, or 965,012 tons over 1909. The gross revenue was 995,591 $\frac{1}{2}$. After meeting interest on stock, sinking fund, writing off for reserve and renewals, etc., there is a net balance of revenue carried forward of 46,160 $\frac{1}{2}$., compared with 57,929 $\frac{1}{2}$., in the previous year. The total revenue collected from "rates on goods" from November 1, 1910, to the close of the financial year, March 31, 1911 (five months), was 133,787 $\frac{1}{2}$. In order that representations from traders as to the levy might be promptly and fully considered they were remitted to one of the Standing Committees to be dealt with, and, where found necessary, adjustments were made, with the result "that so far no prejudicial effect is apparent on the trade of the Port."

The Sugar Convention.

An interim report of the British delegate to the recent meeting of the International Sugar Commission at Brussels, when the proposal of the Russian delegate to authorise an increase of the amount exported from Russia to European countries was considered, has been issued as a White Paper. Mr. Law, the British delegate, pointed out that by consenting forthwith to a temporary suspension of the Russian limitation the Commission would give striking proof of their desire to do what they could to prevent an excessive and artificial rise of prices on the world's markets. The present situation, he said, was largely due to the action of speculators who had accumulated stocks and withdrawn a considerable quantity of sugar from circulation. The British Government was not in a position to state what their attitude was likely to be towards the renewal of the Convention upon the expiry of the five years for which it had been concluded, and he (Mr. Law) doubted whether Great Britain would be prepared at so early a stage to decide whether they should continue to adhere to the Convention. December 8 was fixed for the adjourned meeting, when the decision of the Commission as to Russia will probably be announced.

Since we wrote on the position of sugar in our issue of November 11 the market for raw beet-sugar has remained unsettled, the trade waiting developments in regard to Russia. The "Grocer" reports that large quantities of cane-sugar will come to this country this season, and that further returns published show that the higher prices ruling have given a decided check to consumption, which is satisfactory as keeping prices down to a level which are already high enough. Meanwhile cautious buying on the part of the trade appears to be the best procedure at present.



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

Extract. Filicis Maris.

SIR,—With reference to your article on this subject in your issue of November 11, index folio 727, and the further remarks in the *C. & D.*, November 18, we wish to state that it is neither impossible nor difficult to get pure extract of male fern if buyers would only be willing to pay the right price. For some time past our sales of this article have fallen off considerably, although our principals, Messrs. C. F. Boehringer & Soehne, Waldhof, near Mannheim, are one of the largest makers of the extract. This decline was due to the great difference between our quotations and the prices of "cheap Jacks." Messrs. Boehringer assured us that it was absolutely impossible to make a pure and reliable extract at the prices quoted by some makers and dealers. When we pointed this out to buyers, a good many of them replied that "we were hopelessly out of it; that the cheap article offered was guaranteed B.P., and this was quite sufficient for them." Our principals recently tested a sample of one of the cheap makes, and ascertained that it contained only about 8 per cent. of crude filicin, while their own extract contains about 27 per cent. We are pleased to note that Mr. Parry will read a paper on this subject, and hope that buyers will begin to realise the importance of dealing with first-class manufacturers only.

Yours faithfully,

8 Harp Lane, E.C.

DOMIER & Co.

Dispensing Opium for Infants.

SIR,—If you got a prescription for an infant of twelve months, calling for teaspoonful doses of a mixture composed of one drachm of tincture of opium in three ounces of chalk mixture, would you dispense it? The theoretical dose, you observe, is 2 $\frac{1}{2}$ minims, but the real amount given with the domestic teaspoon would be at least 4 minims of the laudanum. Out of the 13,000 pharmacists in Great Britain and Ireland, how many would dispense the mixture as written? And if any one of them did dispense it—and if the child died—what would be the chances of a verdict for manslaughter? We all know, of course, that the pharmacist should communicate with the prescriber, but what if this should be impracticable? As you know, this case has recently happened in Dublin (*C. & D.*, November 18, index folio 734), and I suggest that chemists should take it as an object-lesson on which to hammer out the question of the pharmacists' duty in such a case. One of the witnesses against the dispenser on the point was a physician, who deposed that he constantly prescribed opium for infants. This naturally impressed the hearers. But what is the fact? Every chemist in Dublin knows that his prescription is one drop in a two-ounce mixture, whereas it was made to seem as if he approved of four-drop doses.

Yours truly,

Dublin, November 21.

J. C. McWALTER.

Dispensing under the Insurance Bill.

SIR,—The answer of "Xrayser II." to a drug-store proprietor's letter in the *C. & D.* of October 21 is surely illogical. It is virtually this: Only registered pharmacists may sell scheduled poisons; drug-store proprietors, who sell the majority of medical requisites and legally dispense a great many prescriptions, are debarred from selling scheduled poisons; therefore pharmacists ought to have the monopoly of supplying goods to insured persons. Allow me to reverse the argument. Drug-store proprietors sell all goods required by insured persons, except scheduled

poisons; pharmacists are licensed to sell scheduled poisons; therefore drug-store proprietors ought to have the monopoly for the supply of goods to insured persons—pharmacists to dispense scheduled poisons. It must be admitted this is more generous to pharmacists than "Xrayser II." is to drug-store proprietors, whose interests he would ignore.

Yours respectfully,
S. L. (239/32.)

SIR,—*Re* the letter of "Drug-store Proprietor," commented upon by Xrayser II., let me adduce an argument as to the deteriorating influence of unqualified drug-sellers. I am a registered pharmacist, residing in a country village, practising my legitimate calling after having conformed to the State's requirements that I should prove myself fit for my vocation by upbringing, by education, and by examinations. Opposed to me displaying all the customary and traditional *armamenta* of a chemist and druggist (coloured carboys, specie-jars, and the like), are two "drug-stores," neither proprietor of which has even passed the Preliminary examination in general knowledge. Through this undue competition I make but an indifferent living; indeed, I am contemplating a move. When I have gone away, the inhabitants will be put to the inconvenience of having to walk some ten miles to another registered chemist for their medicines and potent drugs. Will this be to the advantage of the inhabitants? Will it be an advantage to them in cases of urgency, say, under the Insurance Act, when distance may mean death and not life? Who is to be considered here—the unqualified dealers in drugs, who know nothing of the fatiguing studies, the cost, and the distressing anxieties of exams., or the public, starved of the services of a right and proper person qualified as required by Acts of Parliament to deal in things with which he is familiar, microscopically as well as macroscopically, and whose very *raison d'être* is a safeguard against roguery, ignorance, and public danger?

Yours, etc.,

RICARDO. (8/1.)

Fife and the National Insurance Bill.

SIR,—I venture to quite disagree with the conclusions arrived at by "Xrayser II." in the *C. & D.* of November 11, when he says:

"The community is never consciously unjust to those who do its work; the reverse is the case, for the inevitable tendency, where public money is being spent, is for someone always to be at hand to see that someone else is not defrauded of his proper share. Thus it is that we so seldom see a rate or a tax coming down; they are always on the up-grade."

I suggest that the reason why rates and taxes tend to go up is not that given here, but that they increase mainly because with every year expenditure is more varied and the objects more costly. Take only one instance, education; the school built and equipped to satisfy H.M. Inspector ten years ago for a given number of scholars would fail to earn a grant to-day. The actual cost is enormously increased, but the increase is due to the expanded requirements of the community, and I very much doubt if the builder of the better equipped school of to-day gets better profits than the contractor ten years ago. Those who are at hand to control the exchequer are as a rule acutely sensitive to the effect their actions will have on the rates, for they very well know that if they have any personal share in an appreciative rise in the rates, they are marked men whose position tends to be at the bottom of the poll at next election. One can see how this bears on the present position with regard to the National Insurance Bill. If those in charge of the local administration of the Act are elected by the votes of the community, depend upon it they will take very good care that sentiment does not come into the affair at all, and they will see to it, if they have any choice, that it will not be the scheme most likely to benefit the pharmacist that will appeal to them most and secure their support, but that which will take least out of the local rates. It is evident that "Xrayser II." has not quite fathomed the meaning of the proverb he quotes. I could give him another, but perhaps he had better digest the first a little longer. His sneer at Fife eloquence is not worthy of his pen, and will be much regretted, I feel, by all who have any knowledge of the gentleman at whom it is levelled—

presumably Mr. David Storrar, whom few living pharmacists equal in clear-headed insight into a difficult and complex situation. Mr. Storrar is the last man to write merely for writing's sake. Apart from this, however, what does "Xrayser II." mean by burying the hatchet? I suppose by the Fife brethren he refers to the Fife Pharmaceutical Association? If so, he labours under an entire misapprehension of the facts of the case if he thinks there is either opposition or antagonism to the "overwhelming majority." The Association have all along acted in support of the Council, and at the last meeting of the Association resolutions were passed strengthening the hands of the Council. No schismatic feelings have been given vent to, far less any hatchet-swinging. It is one thing to offer suggestions, quite another to oppose.

Yours, etc.,

ANOTHER FIFER. (234/63.)

Subscribers' Symposium.

For questions, answers, incidents, and interchange of opinions among "C. & D." readers.

Cucumber-juice.

Pickles (233/20) asks: Can any of your readers give me the best method of extracting the juice from cucumbers in quantity?

Keeping Price-lists.

Can you, Sir, or any of your readers suggest a really good method of keeping price-lists (whose name is legion) so arranged as to be ready for reference at a moment's notice.—*Esrom* (234/56).

What Others Say of the "C. & D."

"I have read the *C. & D.* for the last forty-five years; always interesting and instructive," writes an Isle of Wight pharmacist (3/21).

A *Manchester M.P.S.* (7/25) writes: "I have pleasure in herewith sending my annual subscription to THE CHEMIST AND DRUGGIST (cheque enclosed for 10s.), the most up-to-date journal published for the benefit of the chemist in business to-day; a journal which is unbiassed in its opinions and always to the point, without fear or favour. Wishing you every success and prosperity."

Explosive Measures.

I once was washing out a 16-oz. green-flint bottle under the tap when it suddenly burst with a report as loud as a pistol-shot, and the fragments of glass flew all over the shop. Perhaps this was due to the same cause as the measure cracking mentioned in last week's *C. & D.*—*J. F. Hewitt* (11kley).

One of my customers complained that compound liquorice-powder when mixed with water in a wine-glass had caused the wine-glass to crack around the bottom where the stem joined the glass proper. He had broken five wine-glasses in succession in this way. I expressed surprise, and asked him to bring one of the wine-glasses for inspection. Next day he brought a new wine-glass and asked me to try the experiment. I did so, filling the wine-glass about half-full with cold water and stirring into it one teaspoonful of pulv. glyc. co. The bowl of the glass cracked round the bottom where it was joined on to the stem.—*A. G. Cope* (Totton, Hants).

Legal Queries.

Consult the Legal Advice Section of "The Chemists' and Druggists Diary," 1911, p. 435, before writing about your difficulty.

Experientia Docet (229/35).—As you surmise, your letter is libellous, and is therefore not published.

F. C. C. (237/25).—Lin. ammoniac, B.P., contains less than 5 per cent. by weight of anhydrous ammonia, so that it is outside the Privy Council regulation regarding the sale of liquid ammonia.

Employer (230/40).—It is customary for assistants to give and receive a calendar month's notice, but there is no definite ruling requiring the notice to be given on salary day. It may be given on any date.

Salol (5/34).—Reference to the Poisons Schedule in the *C. & D. Diary*, p. 435, would have rendered unnecessary questions submitted. The answer to the first three questions is "No," and to the fourth "Yes." (See the *Diary*, p. 444.)

Window (238/13).—We can only reply further that, assuming the window-fittings were "tenant's fixtures," you were entitled to remove them, but you must carefully ascertain that the landlord did not acquire a property in them at the expiration of any of the prior tenancies. You should secure

the attendance in Court, by subpoena or otherwise, of the tenant who erected the fittings. No doubt your wisest course would be to pay the claim, as the amount is so trifling, whereas if you resist the claim unsuccessfully you may have to pay a considerable sum in costs.

L. S. S. (238/26).—The penalty imposed by the Stamp Act, 1891, in regard to receipts for sums of money amounting to 2*l.* and upwards is 10*l.* The section of the Act dealing with the matter is as follows: "If any person (1) gives a receipt liable to duty and not duly stamped, or (2) in any case where a receipt would be liable to duty refuses to give a receipt duly stamped, or (3) upon a payment to the amount of 2*l.* or upwards gives a receipt for a sum not amounting to 2*l.*, or separates or divides the amount paid with intent to evade the duty, he shall incur a fine of 10*l.*"

H. R. (230/66) has a copyhold house worth about 600*l.*, and wishes to make a gift of it to his daughter or to his daughter and her infant children. He is in doubt as to which would be the better course, and also inquires what the probable cost of effecting the gift would be, exclusive of solicitor's charges. [The simpler plan will be to make the gift to the daughter alone, as this will obviate the necessity of appointing trustees. The fees and charges payable upon surrender of and admittance to copyhold land vary extensively in different manors, and should be ascertained by inquiry of the steward of the manor. The surrender will require a 6*l.* Inland Revenue stamp, that being the amount of *ad-valorem* duty payable.]

Subscriber (6/11) does a credit trade. His canvassers obtain signed orders and a deposit of 10 per cent. He finds that rival firms and even discharged canvassers are inducing his customers to transfer their custom. What is his position? Can he enforce contracts already obtained from customers? [There is no remedy against the rival firms, nor against the discharged canvassers, unless they were employed under a contract which prohibited them from soliciting the orders of their employer's customers after they ceased to act as canvassers for him, in which case they are liable in damages or may be stopped by injunction. Contracts already secured can be enforced against the customers, or damages obtained for failure to accept the goods.]

Miscellaneous Inquiries.

We do not as a rule repeat information given in this section during the past twelve months. When references are given to past issues, these should be consulted. Back numbers for the past five years can generally be obtained from our office at the published prices. We do not undertake to analyse and report upon proprietary articles.

J. F. W. (233/54).—EUGENOL IN TUBERCULAR COUGH.—See *C. & D.*, September 23, index folio 494.

W. B. (175/28).—The fibrous roots you send are those of *Andropogon muricatus*, Retz, known in India as vetiver or eus-cus. They are a regular article of commerce on account of the odour they evolve, especially when moistened. In India mats and baskets are made from the roots.

J. F. (237/46).—OPTICAL QUALIFICATIONS.—Full particulars regarding optical examinations and diplomas are given in the Educational Number of the *C. & D.*, August 12, index folio 297.

H. S. (232/45).—GELATIN COPYING-PAD.—See *C. & D.*, August 19, index folio 334.

Bruxelles (212/46).—We do not know of such a comprehensive medicament as you indicate, but you would probably find a useful basis for such a formula in the compound pine-inhalant which was given in the *C. & D.*, September 16, index folio 452.

Mona (213/13).—SHAMPOO-POWDER FOR DRY USE.—This consists of about equal parts of powdered starch and light magnesium hydrate. It needs also a little perfume.

W. D. F. (334/57).—LEATHER-STIFFENER.—In the circumstances you mention it would be advisable to try a solution of shellac in borax. It is made by boiling 2 lb. of shellac and 8 oz. borax in a gallon of water. Thin, if necessary, with borax solution (1 oz. to pint).

W. H. (232/61).—RESTORING VELVET-PILE.—We do not know what is employed for raising the pile of velvet that has been "crushed," but we suggest that you experiment with (1) solution of white of egg; (2) tragacanth in either water or spirit; (3) casein in weak alkaline solution.

W. R. (223/46).—BUTTER AND CHEESE STARTER.—This is, as you surmise, a culture of lactic-acid bacilli.

Veritas (232/10).—BOOKS.—Cushny's "Text-book of Pharmacology and Therapeutics" (Rebman, 21*s.*), the "Dispensary of the United States" (Lippincott, 31*s.* 6*d.*).

Employer (230/40).—LEMON-CURD.—Mr. Bousfield's recipe for this was published in the *C. & D.*, April 18, 1908, p. 611. The Publisher can supply that number for 6*d.*

Electric (226/12).—We cannot undertake to identify the "white substance" you send.

W. G. C. (232/25).—POWDER FOR DESTROYING WORMS ON LAWNS.—This has a basis of dried blood, cotton-meal, and bone-powder, with a fair proportion of mustard-bran. It is not amenable to further analysis.

F. M. (221/23).—PASTE LUBRICANT FOR LEATHER BELTING.—This is a mixture of rubber, resin, and ozokerite. The rubber is melted with an equal quantity of turpentine, and to this is added a melted mixture of resin and yellow wax, the whole being diluted with ozokerite thinned with heavy paraffin oil.

B. P. (219/31).—NASAL-DOUCHE POWDER.—This is approximately of the following composition:

Sodium bicarbonate.	
Sodium chloride,	
Sodium bichlorate	... .. of each 1 part
Sugar	... .. 2 parts

One teaspoonful to be dissolved in half a tumbler of warm water for a nasal-douche.

Thymol (238/31).—You cannot have both zinc chloride and sodium bicarbonate in a mouth-wash.

L. G. (237/73).—It is impossible for us to give the date when the new British Pharmacopoeia will be published. It has not yet reached the stage of being put into type. Probably it will appear in 1913, if not before.

Phenacstin (231/57).—VIN. IPECAC. PRECIPITATE.—(1) The precipitate obtained on mixing ext. ipecac. liq. with dilute acetic acid consists of resinous products and colouring-matter, but there is no loss of active principles. (2) The tannin present in sherry does cause a slight loss of alkaloids on making ipecacuanha-wine, but for practical purposes this is negligible. The use of detannated wine would obviate this. (3) Wine detannated with gelatin is lighter than untreated wine, owing to precipitation of colouring-matter along with the tannin.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," November 15, 1861.

Naphthalized Gas.

The question how far ordinary gas may be increased in illuminating power by making it take up a proportion of naphtha is one of great economical interest. We take the following extract relating to the subject from a report presented by Dr. Aldis to the Vestry of St. George's, Hanover Square: "I made experiments during three weeks upon the increase of illuminating power of the naphthalized gas and the quantity of material consumed. The process consists of passing common gas through a chamber containing naphtha, with which the gas, having come into contact, mechanically combines with the volatile vapours, and produces a greatly increased light. This method is termed naphthalizing gas, for which a patent was taken out by Professor Donovan, October 6, 1850, who applied naphtha to hydrogen, carbonic oxide, and the gases produced by decomposing water by coke. Mr. George Lowe received a patent June 9th, 1832, which has expired, for naphthalizing coal-gas, and French patents have been taken out for the same purpose. But the principle of applying naphtha to street lamps, and the mode adopted by the Company, is new in this country. The Company intend to apply the carburator inside the lantern, below the burner, in order to keep an equable temperature. In one experiment the illuminating power of the common gas when naphthalized was nearly double, and in another it became two and a quarter times greater than the non-carburated. During a series of experiments on the quantity of naphtha consumed I found that it varied considerably, but the average amounted to 10.9 grains per cubic feet of gas. Assuming, then, 11 grains of naphtha to be consumed per foot, the quantity burnt annually would be rather more than 2 gallons, at 3*s.* per gallon. The apparatus is applicable to street-lamps, and the preceding experiments show that the brilliancy of inferior gas is increased and the consumption economised by the addition of naphtha. In St. George's parish, the question of cost must be compared with candle and not with common gas, the parish lamps being supplied with the former."



THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, NOVEMBER 25, 1911

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

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- 7.—WIMBLEDON.—Light Retail and Dispensing; returns £800; net profit £220; good position; price £550, or offer.
- 8.—LONDON, N.W.—Light Retail and Dispensing; returns about £950; good house; low rent; well stocked; price £625.
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3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

COLONIAL BUSINESSES.

We call the special attention of our Colonial subscribers to the opportunity this Supplement affords when they wish to dispose of their Businesses, of getting into touch with likely buyers either at home or in the Colonies.

LETTERS in reply to Advertisements may be addressed to this Office, and will be forwarded to the Advertiser for an additional charge of 6d.

Trade circulars, samples, and printed matter can in no case be forwarded.

BATH.—Old-established, neglected Prescribing and Retail; returns £5 weekly without Patents or Poisons; shop and house (worth £50 per annum) rent free by letting; position admirable for small capitalist, registered or otherwise; price much below valuation. "Sulis" (13/4), Office of this Paper.

BLACKBURN.—Good Business for immediate Disposal; full particulars given to bona-fide inquirers. 10/17, Office of this Paper.

BRISTOL.—Owing to death of proprietor, Chemist's Business for Disposal; shop well fitted and stocked, electric light; low rental; main road; immediate possession. Kirby, 128 Ashley Road, Bristol.

CARDIFF.—Pharmacy, unopposed; commanding position; well fitted; up-to-date stock; mostly working-class Prescribing; half profits; nice house; cheap rent; comfortable living assured; very moderate capital required; splendid opportunity for active man; owing to unforeseen circumstances will sell much less than valuation to effect early transfer; investigation invited. Apply, "Urgent" (12/21), Office of this Paper.

CARLISLE.—Good Cash Business; turnover £580; very few Patents; well stocked and fitted; good opening for Optics and Extractions; £500, part by instalments; owner going abroad; a very sound business. Apply, "A. C.," 157 Radnor Street, Hulme, Manchester.

LIVERPOOL (main thoroughfare).—Old-established Family and Dispensing Business; well-stocked shop; owner retiring; ill-health reason for sale; in proprietor's hands 40 years; rent £32 per annum. For full particulars and every investigation apply H. J. Palmer, 259 West Derby Road, Liverpool.

LIVERPOOL.—In healthy, thickly populated, superior working-class district; Cash Business in commanding position; capable of big expansion; shop lofty, well fitted in modern style, well lighted; working expenses low; commodious dwelling-house; returns over £600, half profit; price £350. West, 178 Walton Breck Road, Liverpool.

LONDON, S.W. (main thoroughfare).—Nucleus of good-class Business, held by vendor upwards of 35 years; now retiring; excellent opening for young, energetic man; to effect a speedy transfer the sum of £300 will be accepted. Apply, 240/63, Office of this Paper.

LONDON, N.—Middle-class Prescribing, Dispensing, and General Retail Business; doing £650 a year; good house, with private entrance attached; cause of sale, retiring from trade; price £250 for quick sale. Apply, "Essex" (10/103), Office of this Paper.

LONDON Suburb.—Two Businesses for Sale, one taking nearly £2,000, and the other nearly £700; thoroughly sound investment; price £1,200; full particulars given to genuine purchaser. Apply, "Retired" (10/13), Office of this Paper.

LONDON, S.E.—Old-established Family Business; unopposed; returns between £7 and £8; over half profit; has done more; much neglected; thoroughly well stocked; owner's death reason of sale; Business could be largely increased under energetic man; low price. 9/28, Office of this Paper.

LONDON, near.—For immediate Disposal, a Light Retail, Dispensing, and Prescribing Business; all cash trade; no near opposition; good house, with all modern conveniences; satisfactory reasons for selling. Apply, 10/4, Office of this Paper.

LONDON, W. (few miles out).—Genuine Light suburban Retail Business, main road; increasing district; returns over £200; modern, double-fronted shop, well fitted, good stock; price £375, or valuation terms; open to fullest investigation. Address, 12/21, Office of this Paper.

MIDLANDS.—Special opportunity; old-established Business; well-appointed shop; best corner position in manufacturing town; returns £500; net profit £200; no Patents; splendid opening for Dental and extension; suit up-to-date man or branch for same; owner will accept under valuation owing to ill-health. Write, giving references, to "Urgent," c/o Wyleys, Coventry.

MIDLANDS.—Good-class Business for Disposal; returns about £1,400, entirely under management; plenty of scope; gross profits 40 per cent.; very handsome Pharmacy, in finest position, market town; low rent; long lease; price £1,200; stock and fixtures are worth £1,000; only cash buyers entertained. Apply, 12/207, Office of this Paper.

MIDLANDS.—For immediate Disposal, as going concern, owing to death, old-established Business in small country town; nearest opposition 8 miles; house and stabling; rent £17 10s.; price £75; suitable for energetic man liking country life. Apply, Andrew Walsh, Gray & Rose, Solicitors, 35 Bedford Row, London, W.C.

NEAR MANCHESTER.—Returns £600; a capital growing Business; rent £28, including house; price, valuation only; reason for selling, having bought much larger concern. Apply, Thos. Tomlinson & Son, Chemists' Valuers, 45a Market Street, Manchester.

NORTHAMPTON.—Chemist's Business (medium-class trade) for Sale; shop well fitted in modern style; is in one of the best positions in the town; chiefly ready money; no Wholesale; returns average over £40 per week, of which 22 per cent. is for Patent Medicines; important Proprietary articles. Apply, A. C. Palmer & Co., St. Giles' Chambers, Northampton.

SHROPSHIRE.—Old-established Business for Sale; neglected; splendid premises, commodious house, garden with fruit trees, warehouses, stables, etc.; pleasant surroundings; nucleus of a good farming and county trade; appointment pays half rent; price £600; no agents; principals only. Apply, "Rex" (11/16), Office of this Paper.

SOMERSET.—Cash Retail and Prescribing Business; returns £800; scope for great increase; well fitted and stocked; good position in main thoroughfare; cause of sale, death and illness in family; net profit £252; terms, lease and goodwill £30, stock and fixtures at valuation. "B.," c/o Bradshaw, Sunnyside, Kenilworth.

SOUTH COAST (seaside town).—Owing to severe illness, old-established Business in good position; returns £450; has been under management for years, and capable of great increase; good house, rent £40; price £225; full particulars and thorough investigation invited. 8/15, Office of this Paper.

SOUTH MIDLANDS.—Light Mixed Country Retail; farming and hunting district; unopposed 6 miles; returns about £1,000; net profits with assistant £280; stock and fixtures about £800; sound and desirable; opening for heavy Agricultural lines; offer for lease, Proprietaries, and goodwill; stock at valuation; cash in full at entry; references required. "Trojan" (9/20), Office of this Paper.

SOUTHERN COUNTY.—Good-class Family, Retail, and Dispensing Business; well situated in good market town about 30 miles from London; returns approach £1,000, and capable of increase; good profits; modern-fronted shop, well fitted and stocked; price £800; this is a genuine business. Address, 12/270, Office of this Paper.

STREATHAM, S.W.—Handsomely fitted, old-established Business; neglected and closed through mismanagement; Dental, Optical, and Dispensing; fine shop and house, every modern convenience, electric light, 8 rooms, kitchen and bathroom, back and side entrance; stands in position to do a large trade. "B. C." (12/38), Office of this Paper.

BUSINESSES FOR DISPOSAL

(continued.)

SURREY.—Prescribing, Retail, and Agricultural; convenient shop, 8-roomed house, garden, stabling; profits good; satisfactory reason for sale; nominal rent; good lease; terms, valuation of stock and fixtures. Apply, "H.," c/o Evans Lescher & Webb, Bartholomew Close, E.C.

WEST OF ENGLAND.—Old-established Light Retail and Prescribing Business, in good central position busy market town; steady trade; many valuable Proprietaries; splendid scope for increase; present hands 15 years; good reason for disposal; well stocked; price low to quick cash buyer; no agents. 10/30, Office of this Paper.

WESTERN COUNTY.—Good Mixed Family and Agricultural business; net profits over £300; price, stock, goodwill, and fixtures £750, or valuation. Apply, 11/12, Office of this Paper.

YORK.—Returns £925; nice Pharmacy in pleasant and busy situation; good house; valuation amounts to £385; reasonable offer accepted; reason for disposal not due to fault of business, which is a good one. Apply, Thos. Tomlinson & Son, Chemists' Valuers, 45a Market Street, Manchester.

CHEMIST'S Business for Sale in South of Scotland; good Agricultural district; no opposition; established 40 years; good-class Retail, Dispensing, and Prescribing; returns average for last 3 years about £525; net profit £180; good house and large garden; vendor's own property; desirous of selling property and goodwill, stock and fittings at valuation. 10/26, Office of this Paper.

FOR immediate Disposal, old-established Homœopathic Pharmacy in central position in a large Midland town; 2 Doctors; suit a young, energetic man; no reasonable offer for cash refused. Apply, "F. C." (8/21), Office of this Paper.

FOR Sale, as a going concern, Mineral-water Business in Newcastle-upon-Tyne, fully equipped, or about 4,000 syphons of 30 oz. Apply, Messrs. H. E. Richardson & Elder, Solicitors, 8 Grainger Street, Newcastle-upon-Tyne.

FOR Sale, snug little Country Drug and Stationery Stores; proprietor giving up owing to accident; rent £25; nearest opposition 4 miles; a low income to quick purchaser; stock optional; furniture may be included, as also all Dental requisites; part payment arranged. Apply, Drug Stores, 5 The Parade, Dagenham, Essex.

FOR Sale, small Cash Drug Store, near Shepherd's Bush, in thickly populated neighbourhood; owner retiring after 14 years' successful occupation; shop and 6 rooms; lease; rent £40; price £80, or offer. "H. N." (13/12), Office of this Paper.

TO Chemists.—Business for immediate Disposal, owing to death of proprietor; terms moderate; no opposition; growing neighbourhood. The Copnor Pharmacy, 4 Seafeld Terrace, Copnor, Portsmouth.

£120 or close offer for good, sound, profitable, old-established Drug Stores, in working-class district, London, E.; no close opposition; comfortably stocked; returns £450; cash trade; few Patents; cheap Prescribing and penny trade; thoroughly genuine; open to every investigation; 6-roomed house; net rental £27. Apply, 13/5, Office of this Paper.

PARTNERSHIPS.

A FIRM of Chemists (London), about to form a company, require a young energetic man (qualified or unqualified) to manage the business; preference given to one that can Extract, but not essential, and prepared to invest £250, for which full security will be given. Apply, in first instance, "Euergetic" (13/3), Office of this Paper.

PARTNER (young) wanted, qualification not necessary, in a high-class old-established Mixed Business, returning between £3,000 and £4,000, to relieve proprietor and extend the trade; to invest £200 or £300. Address, 8/25, Office of this Paper.

TENDERS.

BOROUGH OF BEXHILL.
SUPPLY OF DISTILLED TAR, etc.

TENDERS are invited for the supply of Distilled Tar, Tarvia, or other compounds for use in tar spraying roads during the season of 1912.

The approximate quantity required will be about 40,000 gallons, more or less.

The liquid to be delivered, carriage paid, to S. E. & C. or L. B. & S. C. Railways, Bexhill, as required by the Borough Surveyor.

The prices quoted must include the cost of returning empties.

Tenders to be received by the undersigned not later than the 8th day of December next.

The Council do not bind themselves to accept the lowest or any tender.

T. E. RODGERS, Town Clerk.

Town Hall, Bexhill, November 21st, 1911.

FOR SALE.

FITTINGS.—Mahogany Counters, plate-glass fronted, fitted Cases 6 ft., 8 ft., 12 ft., also Range 60 glass-knob Drawers, Lockers below, Shelves above, Bottles, Jars, and Scales, Counter-cases, various kinds, upright, flat, and bent, 2 ft. to 10 ft.; cheap to clear. Took, 120 High Road, Tottenham (one minute Stamford Hill terminus).

PROPRIETARY for Sale; nucleus of Wholesale Poultry Medicine and Food Business, worked by vendor for 45 years as a sideline with Retail business; latterly neglected owing to age (79); large profits; good prospects for an active man; a small sum accepted for stock and plant. Write, R. C. Mason, Bromsgrove.

TO LET.

UNFURNISHED Rooms to Let over Chemist's Shop, suitable for Doctor or Dentist; good position, opposite Enston Station. Apply, "K.," 40 Seymour Street, N.W.

BUSINESSES WANTED.

ADVERTISER wishes to negotiate privately for a good-class Business; returns from £1,000 to £2,000. Particulars, in strict confidence, "H. P." (8/16), Office of this Paper.

ADVERTISER is open to privately negotiate for the purchase of a good-class Dispensing and Retail Business showing net profits at least £400; strict investigation required; cash ready. Replies, in confidence, to "Pharmacist" (9/29), Office of this Paper.

DISPENSING Business wanted, returning about £3,000 per annum, in London district or Southern Counties; no Optical or Agricultural work. 7/2, Office of this Paper.

OLD-ESTABLISHED Chemist's Business required, where there is a large turnover. Terms and particulars to Mr. Pennington, Auctioneer, Richmond Station.

AGENCIES.

INDIA.—Advertiser, 20 years' experience in the East, is open to act as Managing Representative in India for first-class firm Manufacturing Chemicals, Pharmaceutical Preparations, or Drug-trade specialities, other than Disinfectants; terms would include power of attorney to act for the firm, monthly allowance plus commission, and contribution towards office, etc., expenses. Address, 191/33, Office of this Paper.

SITUATIONS OPEN

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

RESULTS

OF ADVERTISING IN THIS SUPPLEMENT
LAST WEEK Nov 18 1911.

NATURE OF ADVT

REPLIES

MANAGER 45

UNQUAL. ASSISTANT 33

LAB. ASSISTANT 27

QUAL. LADY DISPENSER 25

QUAL. MANAGER 25

QUAL. ASSISTANT 16



This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or name de plume.

TO SAVE TROUBLE.

MANY correspondents answering advertisements in this Supplement enclose remittances to cover the cost of forwarding their letters to advertisers who prefer to be addressed of this Office. The Publisher desires to make it clear that this is quite superfluous and perhaps this reminder will obviate the necessity of the frequent return by him of such remittances.

ANSWER IN TERMS OF THE ADVERTISEMENT AND

REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a MENTAL PICTURE of your suitability.

BE BRIEF BUT CLEAR—millions of applications are consigned to the waste-paper basket UNCONSIDERED, because the reader cannot form this picture from the inadequacy of the materials set before him.

RETAIL.

ABERDEEN ROYAL INFIRMARY.—The Directors of this Hospital invite applications for the office of Dispenser; candidates must have Chemist's certificate from the Pharmaceutical Society. Further particulars may be learned from the Subscriber, with whom applications and copies of testimonials require to be lodged not later than Wednesday, 29th November current. A. Scott-Finnie, Clerk and Treasurer, 343 Union Street, Aberdeen, November 16, 1911.

BARNESLEY.—Smart Junior for a good-class Dispensing and Photographic Retail; easy hours. Salary and full particulars to A. L. Johnson, Ltd., 15 Church Street, Barnsley.

BEXHILL-ON-SEA.—Wanted, a first-class Senior Assistant for about 6 months, competent to be left in charge in absence of principal; 2 others kept; good references indispensable. Apply to F. Wimbush, Pharmaceutical Chemist, Bexhill-on-Sea.

BIRMINGHAM.—Qualified Assistant; must be good Counterman and Dispenser. Apply, stating age, height, experience, salary required (outdoors), and if convenient enclose photograph, to Hedges & Son, Dale End, Birmingham.

BIRMINGHAM.—Competent Assistant (outdoors) for clean Light Retail business. State age, height, references, salary required, to W. Johnson, Chemist, High Street, Stirchley, Birmingham.

BOURNEMOUTH.—Mr. J. K. Matterson has a vacancy for a Junior Assistant, qualified preferred; a good opportunity for gaining experience in a high-class modern Pharmacy; outdoors; 5 Assistants kept. Apply, with full particulars and salary required, to Arcade Pharmacy, Bournemouth.

BOURNEMOUTH.—Competent Junior required, with good Dispensing experience. State age, height, salary required (outdoors), references, and full particulars, to "Manager," Gilbert & Hall, 15 Commercial Road, Bournemouth.

BRIGHTON.—Qualified Assistant (indoors), age about 24, required in a good-class Dispensing business; comfortable home. Apply, with particulars and photo, to W. H. Gibson, 122 King's Road, Brighton.

BUDE, North Cornwall.—Wanted, a smart Junior; good Dispenser; must have knowledge of Photography and good references; indoors; age about 20-21; time could be arranged for reading. State age, height, and salary required to Wm. Rickard, Bude Pharmacy, Belle Vue, Bude.

CHELTEMHAM.—Junior Assistant for high-class Dispensing business; indoors; half-holiday weekly. Please give full details and send photograph with first letter, Beetham & Clark, Promenade, Cheltenham.

GT. MALVERN.—Wanted, about the middle of December, a young qualified Assistant; of good address, accustomed to good-class Dispensing business; indoors. Please state full particulars in first instance and enclose photo if convenient, A. E. Baylis, Gt. Malvern.

HALIFAX (outdoors).—Wanted, smart unqualified Assistant, accustomed to Store trade; must be good Counterman and Window-dresser; weekly half-holiday; no Sunday duty. Apply, with full particulars, stating age, height, experience, references, and salary required, to the Secretary, Taylor's (Northern) Ltd., 3 Woolshops, Halifax.

LANCASHIRE.—Wanted immediately, Junior; good opening for one just out of apprenticeship desirous of obtaining good experience. 10/301, Office of this Paper.

LEEDS.—Wanted, Junior Assistant for Counter and Stock; must be quick, neat, and reliable. Apply, giving full particulars, wages, etc., to Reinhardt & Sons, Ltd., Chemists, 7 Queen Victoria Street, Leeds. Also vacancy for well-educated youth as Apprentice (indoors).

LONDON, N.W.—Wanted, competent Assistant; outdoors; age about 23-25 years; must be a quick and accurate Dispenser and a good Salesman. Please state full particulars of experience and salary required, personal interview preferred; if letter enclose photo, T. F. Elton, 28 Endsleigh Gardens, N.W.

LONDON, W.—Unqualified Junior required; indoors; Continental experience, with knowledge of French an advantage; good opportunity for experience in International Pharmacy. Reply, 9/15, Office of this Paper.

LONDON, W.—Assistant, qualified, to live out. Apply, 220 Edgware Road, W.

LONDON, W.—Required at once, qualified Assistant (outdoors) for a single-handed business; time off and no Sunday duty. Apply, personally if possible, at 53 Harley Street, London, W. Tel. No. 2180 Paddington.

LONDON, S.W.—Junior Assistant for Stock and assist at Counter; outdoors; hours 8.30 to 9 and Saturdays 9.30; half-day off weekly. Full particulars to E. F. Strickland, 28 Broadway, Ealing, W.

LONDON, N.—Friday and Saturday evenings only. Apply, by letter, giving two references, Long, 155 High Street, Stoke Newington, N.

LONDON, S.W.—Junior Assistant wanted for good-class Retail trade (outdoors). Apply, personally, to Lloyd, 125 St. John's Hill, Clapham Junction, S.W.

LONDON, W.—Unqualified Assistant wanted (outdoors), about 25 to 28 years of age; permanency to suitable man. Write, giving full particulars, or call after 3 P.M., Hairsine, 53 Wardour Street, W.

SITUATIONS OPEN *(continued).*

LONDON, N.E.—Experienced Assistant; good Prescriber. Apply, "Chemist," 278 Bishopsgate, E.C.

LONDON.—Qualified Assistant and Branch Manager required; must be active, of good appearance, well up in Photography and have excellent references. Reply, by letter, stating age, height, experience, and salary required, to "R. W., Runham Lodge, 157 Fentiman Road, Clapham, S.W.

MALVERN.—An Assistant, accustomed to a good-class business (indoors); one having a knowledge of Photography preferred. Apply, stating salary required, experience, age, height, and enclose photo, to W. H. Jones, Pharmaceutical Chemist, Malvern.

MARGARET STREET HOSPITAL FOR CONSUMPTION, 26 Margaret Street, Cavendish Square, W.—Dispenser (Lady) wanted for about 3 months; Institution experience essential. For particulars and forms of application write (enclosing stamped addressed envelope) to the Secretary.

NANTWICH.—Wanted, competent Assistant for quick Cash trade in country town; good Salesman and Stockkeeper; need not be qualified, but must be capable of taking charge; age 25 to 30; outdoors; no Sunday duty. Please state age, height, references, salary, and enclose photo, to Young, Chemist, Nantwich.

NOTTINGHAM.—At once, qualified Manager, with undeniable references, for Branch doing General Mixed trade; Extractor and abstainer preferred, but not imperative; only those who have had good general experience entertained; age from 25 to 35. State fullest particulars, including last berth and salary required, Southern, 87 Wilford Road, Nottingham.

READING.—Junior Assistant, about 25, wanted at once, for Quick Light Retail, Dispensing and Photography; must be fairly tall and total abstainer; applicants please send recent photograph, full particulars of experience, and last two references; interview essential. J. Cross & Co., Chemists, etc., 83 Oxford Street, Reading.

ST. LEONARDS-ON-SEA.—Junior Assistant wanted (indoors) for Quick Light Retail and Dispensing. State age, height, references, and salary required, enclosing photo, to T. W. Jones, 55 Bohemia Road, St. Leonards-on-Sea.

SOUTHAMPTON.—Active Junior required for Warehouse and to assist in Retail; outdoors. Apply, with full particulars, salary required, W. Bates & Co., Ltd., 50 Oxford Street, Southampton.

STAFFS.—Manager wanted, for small Country Branch; qualified preferred; age about 30; married; must be able to Extract; salary 35s. per week, with house and lighting free and commission on Dental; easy hours and light work; one half-day; no Sunday duty; if unqualified, 30s. Full particulars to "Extractor" (10/33), Office of this Paper.

THE MIDDLESEX HOSPITAL, W.—Junior Assistant Dispenser (male) required; candidates must have passed the Mirror examination of the Pharmaceutical Society and be under 30 years of age; salary £100 per annum, with luncheon. Apply, stating full particulars, to the Secretary-Superintendent, The Middlesex Hospital, W.

WEST END, where 3 Assistants are kept; indoors; qualified. Apply to "H. S.," 7 Pall Mall East, S.W.

YORKSHIRE.—Unqualified Assistant required, to take charge of Branch; permanency, with 30s. per week, house, and interest in the profits to a suitable man. 10/310, Office of this Paper.

COMPETENT unqualified Junior; outdoors; London suburban good-class Retail, Dispensing, and Photographic; half-day weekly; Sunday duty 2½ hours fortnightly. Particulars, including age, height, experience, salary required, enclosing photo, to Matthews, Ltd., Hoppers Road, Winchmore Hill, N.

JUNIOR, unqualified, smart and active, for quick Cash trade; Photography; outdoors. Give age, height, references, to Freshney, Victoria Street, Grimsby (photo).

JUNIOR; outdoors; time for study; Light Retail and Dispensing. Apply, with full particulars and photo, to J. Hooper, M.P.S., Widmore Pharmacy, Bromley, Kent.

JUNIOR Assistant wanted. Full particulars, Medical Hall, Aberfan, South Wales.

MANAGER, young, qualified, of good appearance, for Branch; essentials: Extractor of ability, good Counterman, Window-dresser, trustworthy, sober, energetic, well recommended; permanency with interest in profits to right man. State age, height, salary expected, experience, and references, in first letter, with photo (returnable), to Marfitt, Chemist, Infirmary Square, Leicester.

MANAGER for a good-class Retail and Dispensing business, Newcastle-on-Tyne district; must be a first-class man, abstainer, of good appearance, and address; also possess exceptional business ability, and able to compete successfully with severe store competition; age between 28 and 40; qualification not essential; assistant kept; only men with above qualifications need apply. Letters, enclosing photo and full particulars, with salary required to be addressed to 10/7, Office of this Paper.

PART-TIME Assistant required; evenings only; would suit Student; near Pharmacy Schools; interview preferred. Beech Chemist-Optician, 156 Stockwell Road, S.W.

QUALIFIED Assistant wanted early in January; a single or married man would be treated with. State salary required. Hardwick, 21 Commercial Road, Bournemouth.

QUALIFIED, not over 24 years of age, unmarried, abstainer at beginning of December. Usual full particulars, with salary (indoors), Henry Francis, 22 High Street, Bromley, Kent.

QUALIFIED Branch Manager; must hold good references as experienced in brisk Cash Retail; abstainer preferred. Details to Griffiths, Chemist, Droylsden.

QUALIFIED wanted for small Branch; middle-aged; good Window-dresser and Prescriber. State full particulars in first letter, W. Pilling, Ltd., Chemists, 192 Hyde Road, Manchester.

QUALIFIED Dispenser wanted in a City house; short hours, no night or Sunday duty; also an unqualified Junior for the Patent and Sundries Counter. Apply, by letter, stating age and wages required, to "Rex," c/o Street's, 30 Cornhill, E.C.

UNQUALIFIED Assistant wanted, accustomed to country trade; one requiring a permanency; good prospects to suitable man, outdoors. Apply, giving full particulars, 11/7, Office of this Paper.

WANTED at once, smart Junior; must be good Counterman and used to Cash trade. Send details to Griffiths, Chemist Droylsden.

WANTED immediately, competent Junior Assistant, age about 22; indoors or out. Apply, J. Stovin, 5 Central Buildings, Seaside Road, Eastbourne.

WANTED at once, gentlemanly Assistant, unqualified, for a business in the City; must be a quick and accurate Dispenser and first-class Counterman; character also must bear the strictest investigation. State age and salary required, 10/31, Office of this Paper.

WANTED, a young man to put up Stock and as Stockkeeper. If personal application, any morning between 10 and 12 o'clock, Wallas & Co., Chemists, 36 New Cavendish Street, W.

WHOLESALE.

A LONDON Wholesale house, supplying Surgical and Pharmaceutical Specialities, desires the services of a capable gentleman, of good address, to call upon the Medical Profession and Institutions; first-class experience in this particular direction essential; applicants should state age and full particulars concerning the nature and duration of previous activity and present engagement, if any; all communications will be treated as strictly confidential. Apply, "Plastical" (13/19), Office of this Paper.

DRUG and Sundry Department (Ireland).—Manager (qualified preferred) required to take charge and develop Department. Must have a knowledge of Buying and Selling and a good organiser; salary commencing £140; good opening for a capable man. Apply, by letter, giving particulars, to 8/38, Office of this Paper.

FOREMAN Packer.—A highly efficient man, with first-class Export experience, required in London Wholesale Druggists; only those with thoroughly good training and capable of controlling others need apply. Full particulars to 13/18, Office of this Paper.

INVOICE Clerk wanted; must be good Penman, quick and accurate at figures, and experienced in Export Invoicing. Reply stating full details of experience and credentials, to C. B. Barker Stagg & Morgan, Ltd., Devon Wharf, Emmott Street, Mile End, E.

PUT-UP Goods Department.—Wanted, smart man, with taste and experience of this work, to take charge of and extend a small department in the provinces. Apply, with full particulars, salary expected, etc., to "Musk" (242/3), Office of this Paper.

SURGICAL Instruments and Sundries.—Smart Youth; must be experienced. Age, salary, etc., 243/35, Office of this Paper.

TRAVELLERS, with established connection among Chemists and Stores, wanted to carry an exceptionally attractive line of American Toilet Soaps; something new; applicants must be at present representing firms of standing; liberal commission and part expenses allowed to those who can produce results. Full particulars, 227/7, Office of this Paper.

WANTED, qualified Analytical working Chemist, experienced in making Soluble Pessaries; permanent situation at a progressive salary to suitable man; hours 9 till 4. Apply, by letter, "Advertiser," Radnor Lodge, 8 Spence Road, Clapham Junction.

SITUATIONS OPEN

(Colonial, Indian, and Foreign).

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of **6d.**

RANGOON.—Assistant required, age about 25 to 30; Minor qualifications; 4 years' agreement; salary first year 250 rupees per month, rising by 25 rupees per month annually to 325 rupees; passage paid. Apply, stating full particulars as to experience, etc., to Indo Burma Co., Ltd., 108 Wool Exchange, E.C.

ROME.—A Season berth, January 15 to April 30; knowledge of French essential. Apply, stating necessary particulars, to G. B. Daniel, 650 Holloway Road, N.

SOUTH AFRICA.—Qualified Assistant, unmarried, required for a Coast town, about 25 years of age preferred; 3 years' agreement; passage paid out; salary £204 first year, £216 second year, £228 third year (outdoors). Apply, by letter only, "L," 14 Lafone Street, London, S.E.

SOUTH AFRICA. — Required immediately, first-class qualified Assistant; age about 24; single; one with good Dispensing experience; salary first year £204, second year £216, third year £228; second-class passage paid out; 3 years' agreement. Apply, "R. H. L." C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, Great Eastern Street, E.C.

QUALIFIED Assistant, about 24, required for large Chemist's in Shanghai; 4 years' agreement and passage paid out and home; good prospects for capable man. Apply, with full particulars, to 243/17, Office of this Paper.

WANTED, for Geneva, Switzerland, an English Pharmacist, with good references. Send photograph and particulars of height, etc., to O, 6385X, Haasenstein & Vogler, Geneva.

SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of **6d.**

[HOME]. RETAIL.

QUALIFIED; 27; 12 years' experience; permanent or temporary. 9/27, Office of this Paper.

QUALIFIED Dispenser (Lady, 21) desires post; experienced. Apply, 8/22, Office of this Paper.

QUALIFIED; Assistant or Manager; 34; best experience. "Statim," Newlands, Barnard Castle.

UNQUALIFIED; 38; tall; Store experience; Dispenser; disengaged. "V," 39 Florence Road, Deptford.

LOCUM or permanent; 26; experienced; any capacity. Durrant, 14 Grove Parade, High Road, Finchley, N.

JUNIOR; 20; tall; abstainer; 4½ years' experience, Retail, Dispensing, Photography. 9/11, Office of this Paper.

LOCUM, Branch Manager, or Senior; F.S.M.C.; experienced, reliable. "Chemist" (10/22), Office of this Paper.

MANAGER; qualified; experienced; thoroughly reliable and trustworthy; abstainer. 9/24, Office of this Paper.

ASSISTANT; 22; 7 years' experience. Photography and Dispensing. "Radium" (9/25), Office of this Paper.

DISENGAGED; temporary or permanent; qualified; good experience; good references. 11/18, Office of this Paper.

AS Senior or Dispenser; unqualified; aged 37; good experience and references. "Statim" (9/16), Office of this Paper.

JUNIOR; 21; Dispensing, Counter, Photography; London, W. or S.W.; disengaged. "P," 15 Studley Road, Clapham, S.W.

JUNIOR; unqualified; 23; knowledge of French and Photography; West-End experience. "A. B.," 16 Chesilton Road, Fulham.

ELDERLY qualified Manager, Assistant; permanency; single; active; Prescriber. "Reed," 4 Woburn Street, Bloomsbury, W.C.

QUALIFIED Manager; energetic and reliable; thoroughly competent and up to date; abstainer. 9/25, Office of this Paper.

JUNIOR; 21; 5 ft. 9 in.; 5 years' experience; Lancashire or Yorkshire preferred. Howson, Withens Lane, Liscard, Cheshire.

AS Improver, wishing to gain a knowledge of Dispensing; good at Counter and Stockkeeping. State salary, 10/19, Office of this Paper.

QUALIFIED; Scotchman; 28; first-class Dispensing and Counter experience; speaks French and German. Miller, 273 Regent Street, West.

SITUATION as Light Porter; Counter, Stock, Photography; active, willing; good worker. Apply, "Will Work" (3/04), Office of this Paper.

IN MANCHESTER.—Dispensing, practical and technical Photography; excellent Counterman; aged 25; unqualified. 9/15, Office of this Paper.

SCOTSMAN; qualified; 25; first-class experience; abstainer; Manager or Senior; highest references. "Statim" (11/5), Office of this Paper.

LOCUM; until April or any shorter period by experienced Pharmacist; 35; lately manager high-class Dispensing business. 9/36, Office of this Paper.

MANAGER; all-round town and country experience; Extractor; moderate salary; qualified; disengaged. James, 2 Fleming Road, Newington, S.E.

QUALIFIED; Manager or Assistant; wide experience, Retail, Dispensing, Photography, Prescribing; 35; disengaged. J. Farber, 5 Abbey View, Bath.

SMART, experienced Junior (age 20) requires position with a high-class firm; indoors if necessary. Apply, "F. G.," Vernon, Abingdon Road, Southsea.

PART-TIME; in or near Manchester; 4½ years' good-class Dispensing and General Counter practice. Harris, 60 Devonshire Street, Higher Broughton, Manchester.

ASSISTANT; thoroughly competent; salary 35s. (outdoors); married, no family; good references; active and reliable. "Spero," 48 Devonshire Road, Cambridge.

QUALIFIED Manager or Assistant; experienced Dispenser and Prescriber, both town and country; obliging; tall; age 42; disengaged. Longman, 17 York Chambers, Adelphi.

SITUATIONS WANTED *(continued).*

RELIEF; City and West experience; qualified. "M.P.S.," 34 Finsbury Pavement, E.C.

QUALIFIED; single; 29; Store experience. Hunter, 13 Vineyard Street, Garston, Liverpool.

MIDDLE-AGED Chemist requires Relief work, near London. 13/2, Office of this Paper.

LOCUM; qualified; middle-aged; all-round experience. "C. L. S.," 104 Mill Road, Cambridge.

WITH evenings free; 26; abstainer; City experience. "R. W. J.," 132 Riverdale Road, Plumstead.

QUALIFIED; 26; West-End experience; disengaged December. "Rhei," 281 Canhill Road, Leytonstone, Essex.

QUALIFIED; any capacity; Locum or permanent; disengaged. "Chemist," 48 Conningham Road, Shepherd's Bush.

QUALIFIED; 27; Senior or Manager; accustomed to high-class Dispensing and Retail. 12/40, Office of this Paper.

RELIEF; day, half-day, or arrangement; Extractor; highest references. "Chemist," 33 Seaford Road, West Ealing.

QUALIFIED, Dispensing, Counter, Photo, desires Branch Managership. Hodgkinson, Nelson Street, Barrow-in-Furness.

QUALIFIED; Senior; Dispensing, Light Retail; exceptional references. "Excelsior," 53 Richmond Street, Ashton-under-Lyne.

28; unqualified; 12 years' experience; good references; outdoors; Photography; London or suburbs. 12/37, Office of this Paper.

CHEMIST'S son requires situation as Improver, Junior; 18; indoors; London or Home Counties. Coombes, Chemist, Great Missenden.

MANAGER or Senior; qualified; first-class experience, references; good Dispenser; moderate salary. "T.," 5 Blenheim Crescent, W.

TEMPORARY Assistant available until January; qualified; 30; excellent experience and references. "Pharmacist," 19 Clarendon Road, W.

WEST OF ENGLAND.—Qualified Manager would like to hear of a post; disengaged January 1, 1912; 35; highest references. 12/30, Office of this Paper.

ACTIVE, reliable Assistant; 49; single; abstainer; unqualified; thoroughly experienced; good references. "Chemist," 5 Charles Street, Hillingdon.

ASSISTANT; 22; unqualified; 7 years' good all-round experience; abstainer; excellent references. Mr. A. Smith, 51 Ouloden Street, Poplar, E.

LONDON.—Unqualified; 21; experience general, 4½ years London, N.; recent testimonials; willing; disengaged. "W. W.," 28 Eade Road, Finsbury Park, N.

UNQUALIFIED; 23; married; 8 years' experience, Dispensing, Photographic, Counter; outdoors. Lloyd, c/o Mr. Burgess, Chemist, Preston Drive, Brighton.

MANAGER or Senior; disengaged; 37; tall; Dispensing, Photographic; good references; personal interview. "Quercus," 141 Westminster Bridge Road, S.E.

ASSISTANT or Manager; unqualified; 32; single; Prescriber, Dispenser, Extractor; excellent references; Yorks preferred. "W. B.," 15 Worship Street, Hull.

MANAGER; permanent or temporary; disengaged; qualified; married; age 47; 31 years' town and country experience. "Minor," 3 Helena Avenue, Margate.

UNQUALIFIED; 24; height 5 ft. 8 in.; 7 years' good Retail, Dispensing, and Photographic experience; disengaged. Whyte, 32 Crescent Grove, Clapham Common, S.W.

EXPERIENCED Pharmacist requires Managership; highest references; succession entertained if possible. "Pharmacist," Clydebank, Parkdene Avenue, Parkdene.

SMART all-round worker; abstainer; thoroughly understands management; highest references; well up; London or near preferred; unqualified. "F. H.," 210 City Road, E.C.

MANAGER or Senior; qualified; tall; single; excellent all-round experience; energetic and up to date; best of references; permanency desired. 8/25, Office of this Paper.

QUALIFIED; 32; married; steady; excellent experience. Dispensing and Counter; Branch Manager or Assistant; disengaged. Alexander, 27 Carnegie Street, Arbroath, Scotland.

BRANCH Manager or Assistant; Minor and Hall qualifications; over 20 years' experience; outdoors; moderate salary. "W. H. M.," 12 Shelley Grove, Southport.

COMPETENT, unqualified, with City and W.C. experience; 20; abstainer; Photography; highest references; please state hours. Jackson, 132 Riverdale Road, Plumstead.

PHARMACIST; abstainer; 27; 5 ft. 8 in.; disengaged December 19; outdoor berth preferred. W. J. Bowness, c/o Mr. Baylis, Barnard Green Pharmacy, Great Malvern.

COMPETENT Assistant; 43; tall; permanency or Locum; high-class Dispensing experience; days or half-days entertained. "B.," 6 Station Parade, Horn Lane, Acton, W.

EXPERIENCED, qualified Manager; married; permanent or temporary; first-class experience and references. "Irex," Wright, Layman & Umney, Southwark Street, S.E.

QUALIFIED Manager or Senior will require position after Christmas; 35; unmarried; good-class neighbourhood preferred; first-class experience. 12/31, Office of this Paper.

JUNIOR or Improver; 20; indoors; 3 years' apprenticeship; time for study required; London or district; good testimonials; disengaged. "C.," 14 Cowley Road, Leytonstone.

JUNIOR, tall; 6 years' experience; good worker; Window-dresser, Photographic; good references; disengaged; Yorks preferred, not essential. "S.," c/o Croshys, Newborough, Scarborough.

QUALIFIED; elderly, active; exceptional experience and references to date; temporary or permanent; accustomed to management; London only; moderate salary. "L.," 87 Chalk Farm Road, N.W.

QUALIFIED Dispenser (Hall) and Surgery Assistant, with medical curriculum; thoroughly understands general routine of Surgery work; good references. "Delta," 54 Gurney Street, S.E.

TYNESIDE or neighbouring district preferred; Assistant or Manager; 22; qualified; tall; single; abstainer; Photography; excellent references; disengaged; outdoors. Hardy, Harton, South Shields.

SMART, tall, energetic Assistant requires situation; good Prescriber and Counterman; Extractor; very obliging; excellent references. Reply to "Aspirin," 129 Heywood Street, Hightown, Manchester.

MANAGER; qualified; 33; married; experienced, Dispensing, Prescribing, Counter, Photography; abstainer; disengaged; excellent references; permanency desired. Harper, 7 Albemarle Road, Seacombe, Cheshire.

EXPERIENCED, Dispenser, Prescriber, Photo trade, Painless Extractions, Fillings, Impressions; permanency desired; outdoors; single; unqualified; all-round man; good references; where Dental branch preferred. 10/32, Office of this Paper.

PHARMACIST requires permanency as Branch Manager; 11 years' experience of good-class Pharmacy; London and seaside experience; good references; South of England preferred; available December 11. E. R. Samways, 47 North Street, Taunton.

ASSISTANT, young, but well up in all branches of the Drug trade, desires situation in England; knows no English; good references; salary 30 frs. per month, with board and lodging. Write to Ch. Van Uytrecht, 25 Avenue Louise, Brussels, B. 1190.

WHOLESALE.

Trade circulars, samples, and printed matter can in no case be forwarded.

DRUG Traveller, with turnover of £5,000 per year, desires change. 11/01, Office of this Paper.

CHEMIST'S or Laboratory Porter; excellent references; smart; abstainer. "H," 7 Kingslea, Leatherhead.

CHEMIST, recently in business (37), tall, desires to Represent good house, either Drugs, Sundries, or Photographic. "Quercus," 141 Westminster Bridge Road, S.E.

YOUNG man, 12 years' Retail experience, would like change; strong, active, willing. "Antiphlogistine" (3/4), Office of this Paper.

ENGAGEMENT required by active, pushing Traveller; 4 years' connection in the South; good Speciality not objected to. 9/39, Office of this Paper.

TRAVELLER, accustomed to Stock-room work and handling large quantities of samples, wishes to Represent first-class house. 11/10, Office of this Paper.

WHOLESALE and Retail, 16 years' experience, requires position as Stockkeeper or position of trust in any department; permanency. 9/8, Office of this Paper.

PROGRESSIVE position desired by young qualified Chemist; capable, with good experience and references; London, Wholesale or Institution. 8/33, Office of this Paper.

TRAVELLER; good personal connection, London and S. Coast; energetic; excellent salesman; Drugs, Specialities, or Agencies. "Salol" (12/28), Office of this Paper.

TRAVELLER (29) requires engagement, Sundries, Perfumery, Optical, Photographic, or good Speciality; town or country. "Alpha," 29 Monmouth Road, Lower Edmonton, London, N.

LABORATORY or Chemist's Assistant (Hungarian); speaks English, German; 4 years' reference; knowledge of Photography; age 21; 5 ft. 10 in.; disengaged. Kathode, Crown Hotel, Corwen, N.W.

TRAVELLER is open to Represent one other house, Medical or Chemists' Specialities; enterprising house essential; well introduced; part expenses with commission. "Antipyrin" (9/17), Office of this Paper.

EXPERIENCED Chemist; 35; practical knowledge of Manufacture of all Galenicals, Malt Extract and Diastase Compounds, Fine Chemicals and Scale Preparations. Write, in confidence, to 10/6, Office of this Paper.

LABORATORY Chemist (30), widely experienced manager, London and provinces, Manufacturing for home and export, desires responsible position; highest business testimonials. "Pharmaceutical" (10/16), Office of this Paper.

TRAVELLER, with sound connection, representing a first-class London Drug house in South Wales and adjoining Counties, wishes to Represent another good firm on part expenses and commission. "A" (11/4), Office of this Paper.

WANTED.—A qualified Medical Man (M.B., C.M.) wishes to obtain 12 to 24 months' work as Travelling Representative of a reputable firm; will travel anywhere required on salary and travelling expenses, or as may be arranged; has been over 20 years in general practice; highest references and best guarantees. "M. B." (273/40), Office of this Paper.

SITUATIONS WANTED

(Colonial, Indian, and Foreign).

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of 6d.

This heading is reserved for assistants seeking situations in the British Colonies, India, and Dependencies or elsewhere abroad.

JUNIOR (19) requires position. Foreign or Colonial; been through good apprenticeship; good appearance; height 5 ft. 8 in.; good references; disengaged beginning of January. 8/10, Office of this Paper.

MISCELLANEOUS.

£5 will be paid for the best practical scheme by an experienced man for launching successfully a good Proprietary article with a capital of £1,000; nature of article and all particulars on application; winner will be favourably considered for management. 13/9, Office of this Paper.

MADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—400 Baiss Bros. & Stevenson 5½ per cent. Preference, 12s.; 80 Bovril Deferred, 7s. 8d.; 50 Brunner Mond, 97s. 9d.; 1 Camwal £50 Debenture, £36 10s.; 150 Idris "A" 6 per cent. Preference, 5s. 9d.; 50 New Transvaal Chemical, 47s. 9d. (25 per cent. dividend paid yearly since 1905, full year due January); 200 Parke's Drug Ordinary, 2s. 4½d.; 50 6 per cent. Preference, 10s.; 200 A. J. White Preference, 10s. 9d.; 100 Joseph Watson & Sons 10 per cent. Preferred Ordinary, 30s.; 50 G. B. Kent Preference, 16s. 9d.

WANTED (subject).—Allbury Preference; 300 Idris "A" Preference, 4s. 9d.; 200 G. B. Kent Preference, 15s. 9d.; 100 Wright Layman Preference, 20s.; John Knight Ordinary, 23s. 9d.

List of shares for sale and wanted sent free on application. Bankers, London County and Westminster. Established 1898.

AMAZINGLY CHEAP LINES IN SECOND-HAND FITTINGS.—

1 12-ft. Drug Fixture, with 70 mahogany and gold-labelled drawers; 12-ft. range of mahogany Drug Drawers, with Glass Labels, nearly new, £7 10s.; 12-ft. ditto, mahogany and Gold Labelled, £6; 1 6-ft. mirror-centro Dispensing-screen, with handsome carving, £4 15s.; 1 6-ft. bent-front Counter-case, £3 10s.; 120 Gold-labelled Shop-rounds, 1, 1 and 2 pt. sizes, £4 15s.; 1 7 ft. 6 in. set of Plate-glass Shelves, Bars and Brackets, £4. R. TOMLINSON & SONS, Headquarters for Chemists' Shopfittings, Bond Street, Constitution Hill, Birmingham.

COMPLETE second-hand Chemist's Fittings for Sale.—Ranges of Spanish Mahogany Shelving and about 100 Drug Drawers and Cupboards, Mahogany Counter with return end, Dispensing-screen, Wall-case, Perfumery-case and Bent Counter-case; the lot for £45; cost £300; also 3 second-hand Dispensing-screens, at give-away prices. D. Matthews & Son, 14 & 16 Manchester Street, Liverpool.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, E.C.

SHOPFITTINGS (equal to new).—13-ft. Drugfitting, with Mahogany and Glass-labelled Drawers, etc.; 12-ft. Mahogany and Plate-glass Serving-counter, with Counter Drawers at back; Mahogany and Plate-glass Perfumery Showcase and Desk; 6-ft. Mahogany and Bent Plate-glass Counter Showcase; 10-ft. handsome Mahogany Wall Showcase; 6-ft. Mahogany and Plate-glass Dispensing-screen and Counter, with Sponge-case; all in excellent condition; price £60; ready for immediate use. PHILIP JOSEPH & SONS, LTD., 93 Old Street, London, E.C.

PPRINTING FOR CHEMISTS.—Labels, Wrappers, Lists, Folders, Handbills, Stationery; first-class, up-to-date work at very low prices; it costs you nothing to see samples and get quotations: Handbills from 10,000 10s. 9d.; Prescription-envelopes, 1,000 4s. 3d.; Billheads, Memos, Cards, 1,000 3s. 9d.; all carriage paid. Established 1895. Walter Knight (C.), Printer, Rushden, Norths.

INCREASE THE SALES OF YOUR OWN SPECIALITIES.

A year ago a Scotch Pharmacist joining said, "I wish to increase the sales of my own Specialities and add to the number of them." Last week he again writes saying:—"Kindly keep sending me your letters, etc., for another year. Last season I sold over 1 gross bottles (1½ of—your formula), and we have had quite a good Speciality business." Booklet, "How to Increase Your Business," explaining my methods, etc., sent post free to Pharmacists only.

BILLYARD ALLISON, Pharmacist & Business Specialist, RETFORD.

£33 19s. 7d. INCREASED TAKINGS JULY,
£32 9s. 9d. August, £26 17s. 11d. for September

is the latest testimony to the Bernard Slack System of Increasing Chemists' Businesses. If you wish to do like things, send along for free booklet to-day.

BERNARD SLACK, 9 King Street, Wolverhampton.

Nat. Tel. 581.

EXCHANGE COLUMN

One halfpenny per word with name and address. One penny per word if we register the address and attach a number.
No advertisement inserted for less than 6d.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

"PHARMACEUTICAL FORMULAS," 7th edition, good as new; what offers? ROBINSON, Chemist, Exchange Station, Liverpool.
BACK numbers "Chemist and Druggist," 1866-1898; "Pharmaceutical Journal," 1870-1898; "Year Book of Pharmacy," 1870-1882; "Dental Science," 1878-1881; "Dental Surgery," 1878-1880; "Dental Journal," 1882-1883; "Chemist's Diaries," 1872-1910; all cloth bound; what offers? FOSTER, Wheeler Street, Birmingham.

DENTAL.

WHAT best cash offers for 12 Tomes' dental forceps, with lance, in leather pouch? MONTAGUE, 3 Beechfield Avenue, Blackpool.

DRUGS AND CHEMICALS.

5 LB. ol. lavand. Ang., fine old, 45s. lb. 9/21, Office of this Paper.
3 OZ. finest virgin otto; aspirin, trional, antikamnia tabs., salophen, etc., original packages; 35s. lot. WILCOCKSON, Southampton.

OPTICAL AND PHOTOGRAPHIC.

OPTICAL trial-case, cost £3 5s.; about 130 pairs of spectacles and folders, various qualities, equal to new; what offers, cash? "W.," 2 Copenhagen Street, Islington, London.

PROPRIETARY ARTICLES.

TWELVE 1s. 1½d. iron jelloids (adult), new; 10s. prepaid. WILKINSON, Chemist, Rotherham.
WHAT offers?—4 3s. 6d. Fay's veloutine powder; 2 Rachel, 1 rose, 1 blanc; 2 1s. 9d. Vinolia powder, Rachel; 1 2s. 6d. pasta mack; all in good condition. ARTHUR MILLER, Chemist, Bognor.

SHOP FITTINGS.

SHOW-CASE, 40 in. by 50 by 4½, 2 doors, 13 movable shelves, £2; ditto, 53 in. by 7 by 2½, 7s. 6d.; ditto, 42 in. by 21 by 4½, £1; 2 standards, 6 brackets, 2 5-ft. shelves, 17s. 6d. MANN, Chemist, Clacton.

MISCELLANEOUS.

AIR-BED and bellows, second-hand, for sale; 25s. "W." (12/36), Office of this Paper.
SEVEN new dental forceps, B.P. '98, Martindale's 12th, Sewill's "Dentistry"; offers wanted. DUNNING, Fairholme, Jeffcock Road, Wolverhampton.

WANTED.

QUARTER-PLATE hand camera, 1 or 2 injector lantern jets. KERR, Clones.
TOTAL adder cash register; good condition. J. H. SKELTON, LTD., Eastwood, Notts.
RUBBER printing outfit; also hand mixer. JOHNSON, 319 Shoreham Street, Sheffield.
30-GRAIN torpedo suppository mould for dozen or larger. State price, 7/5, Office of this Paper.
OPTICAL trial-case, lens measure, etc. SMITH, 80 Talbot Street, Nottingham.
OPTICAL books; Minor, Major Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.
GARDNER'S or other mixing and sifting machine, capable of taking ½ cwt. or more, for use with oil engine. BOWLING, Chemist, Pembroke Dock.
A TUBE-FILLING machine, hand power, 7 to 14 lb., with ½ in. and 1 in. nozzle. Apply, with full particulars, to PRICHARD & CONSTANCE (WHOLESALE), LTD., 71 Newman Street, London, W.

COLONIAL AND FOREIGN NEWS.

PHARMACY IN TURKEY.—A pharmaceutical faculty, following French lines, has been opened at the Sofia University.

ARTIFICIAL DIAMONDS.—According to reports in Berlin newspapers, Dr. Werner von Bolton, a chemist at the Berlin works of Siemens & Halske, has produced artificial diamonds by the decomposition of ordinary hydrogen-gas by passing over an amalgam of mercury and sodium for several weeks. The carbon deposited from the gas consists of both a non-crystalline form and of crystals of minute diamonds. In some of the experiments diamond-dust was placed in the tube containing the reducing amalgam, with the result that larger, but still very small, stones (of no commercial value) were obtained. The inventor is stated to be engaged on the problem of increasing the size of the stones.

DUTCH PATENT LAW.—According to the new Dutch Patent Law of November 1910, patents will be granted for any invention not sufficiently well known at the time of application to enable it to be manufactured by an expert. Inventors alone have the right to a patent, the first applicant being deemed to be the inventor until the contrary is proved. In the event of a discovery being made by an employé in the course of his business, the patent is taken out by the employer, the inventor being entitled to a sufficient indemnity. The duration of a Dutch patent is fifteen years from the date of enforcement, and the article patented must be manufactured in sufficient quantity in the country within five years under penalty of withdrawal.

POPPY-PLANTING IN SIBERIA.—The "Singapore Weekly Sun" reports that, according to a despatch from Harbin, the Chinese authorities of the new dominion are having difficulties with the Russian officials regarding poppy-planting in Siberia. It seems that the two districts of Suiting and Ningyuan border on Russian territory, and while the poppy has been suppressed in those two and other districts, officials of the Chinese Opium Suppression Bureau have discovered that Russians have begun planting just across the border. The Chinese planters are all natives of Suiting and Ningyuan and have proceeded to Russian Siberia with or without passports. It is alleged that the Russians are giving them every protection, and that the opium will be smuggled into Chinese territory in the future.

Soya Oil.

The market in this commodity was recently rather excited, the short sales of oriental oil made on this side for delivery over the end of the year having caused a keen demand to cover owing to the Civil War in China. Prices advanced about 1½ per ton on the top of the notable previous rise, due to an active consumptive demand. It is reported that the United States has been buying soya oil in Manchuria very freely for early shipment on account of the difficulty of securing supplies of wood oil from China, which product, like many others affected by the troubles in that country, has risen appreciably. The excitement in soya oil has now abated after the "squeeze" which carried the price of the London make in barrels to about 31½ 10s. per ton, although the position in Hull is still affected by oil-mills strike. Quotations for raw material rose recently very considerably for spot and near arrival, but crushers have since been more chary owing to the good prospects of new crop, the shipments of which will be a few weeks earlier than usual, while it is reported that the movement to the railway stations has already started. The cultivation of soya beans continues to absorb a good deal of attention in various parts of the Far East. The experiments made in Victoria (Australia) are said to have given very satisfactory results, last year's operations, under the supervision of the Department of Agriculture, having been productive of a good crop, and the Government is now doing its utmost to extend cultivation. The Ceylon Agricultural Society has imported a large quantity of soya-bean seed from Java, as it has been found that seed from the Dutch colony is most suitable for the Ceylon climate and soil. Previous importations from Manchuria did not prove much of a success.

RUSSIAN ANISE.—The exports from Riga during 1910 amounted to 666 tons, valued at 13,320½, against 466 tons in 1909 and 447 tons in 1908.

Social Gatherings.

Nottingham Pharmaceutical Association.—The first social meeting of the session was held at the Victoria Hotel on November 22. Among others present were Messrs. Ross, Sergeant, Middleton, Gill, Eberlin, Reynolds, Dickenson, Parkes, Carr, Whitchurch, and Freeman. Such matters as the Insurance Bill, federation, dispensing difficulties, etc., were briefly touched upon, but the main topic dealt with embraced the effects of movements like Rexall and Uoal.

Irish Chemists' Assistants' Association.—The first smoking-concert of the season was held on November 17 at the Central Hotel, Dublin, Mr. J. J. Lynn (Vice-President) in the chair. There was a good attendance, and the Chairman made a capital introductory speech. The vocalists included Messrs. Clarke, Kirk, Jackson, Coffey, O'Reilly, Bradford, Cowley, and Ronan. Pianoforte selections were given by Mr. McGrath, recitations by Mr. Kerr, and violin solos by Mr. Kelly. The accompaniments were played by Mr. Levins.

An Edinburgh Social.—A large company of members and friends of the Edinburgh Chemists' Assistants' and Apprentices' Association gathered at 36 York Place, Edinburgh, on November 15, the occasion being the Association's annual social evening. A high-class programme of songs, monologues, and instrumental pieces was admirably rendered during the evening by Misses Cowan and Thom and Messrs. Allsopp, Cowan, Luigi, Stephenson, and Tait, Misses Duncan and Michael and Mr. Miller acting as accompanists. Votes of thanks to the artistes and to the Chairman (Mr. E. J. Brown, President) closed the enjoyable evening.

Midland Pharmaceutical Association.—The opening meeting of the session was held at the Grand Hotel, Birmingham, on November 15, when there was a large attendance of members, who were welcomed by the President (Mr. Edward Corfield) and his wife. Among those present were Mr. Jas. A. Radford and Miss Radford, Sir Thomas Barclay and the Misses Barclay, Mr. and Mrs. H. M. Trafford, Mr. and Mrs. Southall, Mr. H. Buckingham (Hon. Secretary) and Mrs. Buckingham, Mr. and Mrs. Gerrard, Mr. and Mrs. Thomas, Mr. and Mrs. Jeffrey Poole, Mr. and Mrs. Prosser, Mr. and Mrs. Miss Cuxson, Councillor and Mrs. Coleman, Mr. and Mrs. Boucher, Mr. Gibbins, and Mr. Wakefield. A capital musical programme was provided, the artists including Madame Pritchard, Mr. Arnold Griffin, Mr. Fred Thomas, and Mr. Will Gardner. In a brief foreword the President made special reference to the presence of Sir Thomas Barclay, and said the past year had been fraught with a good many difficulties for the chemist. With regard to the National Insurance Bill, they had been well championed in the House of Commons by Mr. Glyn-Jones. The members then adjourned to supper, and a pleasant evening came to a close at 11 o'clock.

A Court-dinner of the Spectacle-makers' Company was held on November 21 at De Keyser's Royal Hotel, Victoria Embankment, London, E.C. Previous to the dinner a Court had been held, when Lord Aldenham was installed as Master, Col. Harry Lawson, M.P., Upper Warden, and Mr. Joseph H. Raphael, Renter Warden. These were present at the dinner, and the company also included Lord Maitland, Sir Horatio D. Davies, Mr. A. C. Cole (Governor of the Bank of England), the Dean of Lincoln, Dr. Seymour Taylor, Dr. Corner, Dr. Philip le Riche, Professor Sylvanus P. Thompson, Col. Browne-Syngé-Hutchinson, V.C., Mr. E. W. Morris (London Hospital), Mr. J. Barry Hopkins (Maw's), Mr. Gilbert Jackson, L.C.C., Mr. Harry Coleman (Institute of Ophthalmic Opticians), Mr. W. H. Wesley (Royal Astronomical Society), Mr. G. E. Ellis, Col. T. Davies Sewell, and Mr. H. W. Sewell. After dinner, the loyal toasts having been drunk, Mr. A. C. Cole, as the newest livery-man, proposed the toast "The Spectacle-makers' Company," and referred to the origin of spectacles and the foundation of the Company. Lord Aldenham replied, and mentioned that this is the third time he has occupied the position of Master. There has, he said, been a recrudescence of the attacks on the City Companies, but the Spectacle-makers, not being wealthy, and having moreover done a useful work for the trade in instituting the examination scheme, will not offer any ground for criticism. In reply to the toast of "The Past-Masters and Wardens," Col. Harry Lawson contended that the smaller companies have done useful work for the community and have justified their existence. Sir Horatio Davies proposed the toast of "The Guests," to which Mr. C. W. Clark, Town Clerk of Stepney, replied. Lord Maitland replied to the toast of "The Livery," the final toast being that of "The Clerk," and Col. Sewell, in reply, mentioned that he had been connected with the company for half a century.



The Odyssey.

Like Ulysses, I wander o'er the earth,
By night and day, a wild train-hunting thing,
Devouring Bradshaw (book of roystering mirth),
So that my Calling's protoplasmic berth
And present glory worthily I sing.

What matter though to Bath I may be sent,
Or Leicester to my services lay claim,
Or Sheffield pine for eloquence unspent,
Or yearnings surge from Northmost parts of Kent,
My tale is simple, and is aye the same.

O cold the way, and weary oft the road,
'Twixt me and mine, but Fate's unbending will
Destines that Nowhere is my true abode,
My lot the vagrant's, with a heavy load
Of platitudes to plank on all who will sit still.

Ah, Mother Bloomsbury, kind to "loyal" sons,
Hard is the task to which I am condemned,
Bad the tobacco, tough the railway buns,
Tattered the "Notes" that he may read who runs,
Yet I'm not sad; the Future, all uncalmed,
With promise of a Better Job is gemmed.

POISONING FATALITIES.

THIRTEEN deaths, five of which were by misadventure, have been reported since our last issue.

Acetic Acid.—At Byker, George Briars (37) was accidentally poisoned through drinking acetic acid in mistake for soda water. The poison was contained in a soda water bottle.

Carbolic Acid was used for suicidal purposes by Kate Theresa Simpson (49), Middlesbrough, and by Annie Chalmer (30), Dundee.

Opium Poisoning, due to accidental overdose, caused the death at Wakefield of Thomas Henry Harris (54), commercial traveller, Manchester. Deceased had purchased a mixture containing laudanum and chlorodyne, and at the inquest the jury endorsed the Coroner's recommendation that chemists, when selling mixtures labelled "poison," should also state the dose on the label.—A verdict of "death from an overdose of opium" was returned at the inquest at Fleetwood on Thos. Barnes, dispenser to a Bolton doctor.

Prussic Acid.—At Leeds, a solicitor's clerk named Henry Ward (50), killed himself by taking this lethal agent.

—Francis Benson Kirby (29), Ph.C., 123 Ashley Road, Bristol, also poisoned himself with prussic acid. A verdict of "suicide whilst of unsound mind" was returned. The deceased was only 29 years of age.

Strychnine.—A Coroner's jury found that Robert Smith, of Warblesheine, near Londonderry, came by his death from a dose of strychnine, self-administered, whilst temporarily insane. Deceased had purchased the poison in Londonderry stating that he wanted it to kill some dogs. He signed the Poisons Register. The jury added a rider to their verdict that they considered poisons could be too easily procured under the present laws.

Sulphuric Acid, drunk in mistake for beer, caused the death of James Edwards (55), schoolmaster, Luxulyan. The acid was contained in a screw-stoppered bottle.

Veronal, taken in accidental overdose, was the cause assigned by a Westminster Coroner's jury for the death of Florence E. L. Sergison, of Crawley, widow of an Army Captain. At the adjourned inquest, Dr. Lawrence, who attended the deceased in her last illness, was re-called; and the following colloquy ensued:

The Coroner: It has been suggested that possibly the veronal found its way into the medicine prescribed by you. In the first place I understand you did not prescribe any veronal?—No, I did not. And your medicine was made up by a chemist of repute? Yes, and I had the advantage of knowing that she had taken it several days before. He added that veronal would not dissolve in solution, and that if it were put into the medicine the nurse would have detected it at once. The Coroner (to the nurse). Did you observe any insoluble substance in the medicine?—No.

The jury found that death was due to coma, produced by veronal self-administered to produce sleep.

Dr. C. F. Steele, of London, was found dying in his bedroom at Smedley's Hydronathic Establishment, Matlock, and the doctors who were called in expressed the opinion that death was due to an overdose of veronal.

Kind not stated.—Wm. Forgie, chemist and druggist, Partick, poisoned himself in Bellahouston Park, Glasgow. —David Leslie, of Arbroath, was found dead in bed with an empty bottle which had contained poison lying by his side.

TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," November 15, 1911.)

*"BELL BRAND," and label device of bell; for chemicals (1). By Ammonia Soda Co., Ltd., Lostock Gralam, Cheshire. 336,191.

*"EUKOVAPO"; for disinfectants (2). By Davis Goodall & Co., Birtley, Durham. 336,612.

*"INDEX," for chemicals (2); "VETIOD," for chemicals (2) and (3). By Menley & James, Ltd., Farringdon Road, London, E.C. 336,933, 336,947/8.

Label design of bottle of citrate of magnesia; for medicinal magnesia (3). By Alfred Bishop, Ltd., 48 Spelman Street, London, N.E. 334,826.

*"OZOFLUIN," and label design of Roman bath with two bath-tubs; for pine-extracts for medicated baths (3). By E. Rosenberg, Oristalstrasse, Liestal, Bale. 335,494.

*"REALGINE-LAROCLETTE," and label design; for medicinal wadding (3). By Benoit Mulsant, 21 Rue de la Quarantaine, Villefranche-sur-Saône. 336,739.

*"CELTOL"; for medicinal chemicals (3). By J. G. Robertson, 327 Pollokshaws Road, Crosshill, Glasgow. 336,834.

*"PYROPHAN"; for medicinal chemicals (3). By Bayer Co., Ltd., 20 Booth Street, Manchester. 336,901.

*"UTOCOLOR"; for paper for colour-photography, etc. (39). By Société Anonyme Uto-color, 21 Rue de la Pointe, La Garenne, Colombes, Seine. 337,083.

*"VINBUL"; for a malt and beef wine (43). By A. E. Brooks, Moorside, West Hill, Putney, London, S.W. 336,181.

*"EN-YAP"; for all goods (48). By J. C. Payne, 21 Clarence Road, Southend-on-Sea. 336,441.

*"VANITY FAIR"; for perfumery, etc. (48). By Yardley & Co., Ltd., 105 Carpenter's Road, Stratford, Essex. 336,945.

SOUTH AFRICAN NEWS.

(From "C. & D." Correspondents.)

The Union.

DRUGS valued at 5,548*l.* were purchased by the South African railways during 1910.

SEPTEMBER DRUG IMPORTS.—The imports of drugs and chemicals into the Union during September amounted in value to 65,597*l.*, or 8,656*l.* less than in September 1910; for the nine months the total is 665,828*l.*, against 605,764*l.* in 1910. Among the more interesting items of the nine months' imports are the following: Apothecaries' wares, 94,548*l.* (1910, 79,359*l.*); medicinal preparations, 84,692*l.* (1910, 87,773*l.*); disinfectants and germicides, 28,604*l.* (1910, 21,969*l.*); potassium cyanide, 140,356 lb. (1910, 248,088 lb.); sodium cyanide, 9,648,015 lb. 1910, 8,705,701 lb.); all other drugs and chemicals, 88,022*l.* (1910, 70,842*l.*). The imports of glycerin for manufacturing purposes during the nine months amounted to 10,818,891 lb. (386,356*l.*), against 9,604,346 lb. (287,148*l.*) during the corresponding period of 1910.

Transvaal.

UNUSUAL CAUSE OF DEATH.—Dr. P. Landon, of Turfontein, met his death on October 27 through passing some air along with an hypodermic injection of anti-streptococcus serum, which he was using for erysipelas. The air thus ejected into the femoral artery caused stoppage of the heart's action.

PERSONAL.—At the recent municipal elections Mr. B. O. Jones, M.P.C., was again returned for Boksburg. The honour of being Mayor has also fallen to his lot for the third time. Mr. Jones was the first Mayor, and has seen nine years' service on the Council. Mr. A. J. Adcock, chemist, Krugersdorp, was returned to the Council at the recent municipal elections. Both of these gentlemen are on the Committee of the Pharmaceutical Society of the Transvaal.

COMING EVENTS.

This section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Monday, November 27.

Royal Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Professor Vivian B. Lewes on "The Carbonisation of Coal" (Cantor Lecture I.)

Tuesday, November 28.

Bradford Chemists' Association, Royal Hotel, at 9 P.M. Mr. F. Pilkington Sargeant on "The Evolution of a Tincture."

Wednesday, November 29.

Cardiff Pharmaceutical Association, Angel Hotel, at 8 P.M. Discussion on "The Difficulties of the Pharmacist in the Sale of Poisons."

Lancaster Chemists' Association, King's Arms Hotel, at 7 P.M. Annual dinner.

Plymouth, Devonport, and Stonchouse Association of Pharmacists, Café Genoni, Plymouth, at 8 P.M. Annual dinner. Tickets (5s. 6d. each) from Mr. T. A. Perkins, 15 Cumberland Street, Devonport.

Public Pharmacists' and Dispensers' Association, St. Bride Institute, Ludgate Circus, London, E.C. X-ray demonstration by Dr. G. Allpress Simmons. Mr. T. H. W. Idris will preside.

Sunderland Pharmaceutical Association, Grand Hotel, Bridge Street, at 7 P.M. Annual dinner.

Thursday, November 30.

Cheltenham Chemists' Association, Plough Hotel, at 9 P.M. Discussion on "Itinerant Canvassers."

Chemists' Assistants' Association, Alexandra Hall, Restaurant Frascati, Oxford Street, London, W., at 8 P.M. Annual reunion (smoking-concert), Mr. Alan Francis in the chair. Tickets (1s. 6d. each) from Mr. A. R. Arrow-smith, 4 Stratford Place, Oxford Street, W.

Friday, December 1.

Bournemouth Pharmaceutical Association, Gervis Hall Restaurant, at 8 P.M. Mr. W. J. Uglov Woolcock on "Pharmaceutical Topics."

Irish Chemists' Assistants' Association, 2 Aston's Place, Dublin. Whist-drive.



View of the Principal Odol Factory.

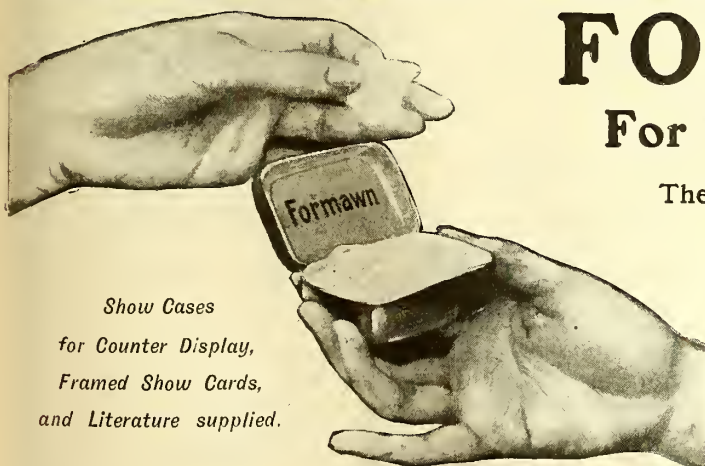
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These products are made by the Ammonia Process, and are distinguished from others by their great purity.

Bicarbonate of Soda. This Bicarbonate answers all the requirements of the British Pharmacopœia. It is a pure, refined, and recrystallised salt, particularly free from metals or any base other than soda. This sodium bicarbonate is specially suitable for the preparation of granular effervescent preparations and salines, seidlitz powders and baking powders, and is well adapted for other medicinal and domestic purposes. It is the purest and cheapest sodium bicarbonate made.

Concentrated Crystal Soda. This sodium compound (sodium sesquicarbonate) is a variety of carbonate of soda in small silky crystals, containing much less water than ordinary washing soda; 1 lb. of it does the work of 2 lbs. of washing soda. Concentrated crystal soda is excellently suited for chemists' trade; they can make a speciality of it, and it is also suited for making water-softeners, brush powders, hair-wash powders, and the like.

Pure Alkali. 55 Degrees. A dry white powder: dissolves quickly and easily in water, making an excellent detergent for use by printers, bleachers, dyers, and for bottle washing. Is nearly equal to 99 per cent carbonate of soda; is much used by glass, paper, and soap makers. The best alkali for soap powders and washing powders.

Pure Soda Crystals.

NOTE.—Proceedings have been taken by the Board of Trade against a person for selling as Soda Crystals an adulterated article, and the High Court has upheld the conviction. See the case of **FOWLER v. CRIPPS**, heard on 8th November, 1905, before a Divisional Court, consisting of the Lord Chief Justice, Mr. Justice Wills, and Mr. Justice Darling.

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Manufactured from pure Carbonate, and supplied of all degrees of strength.

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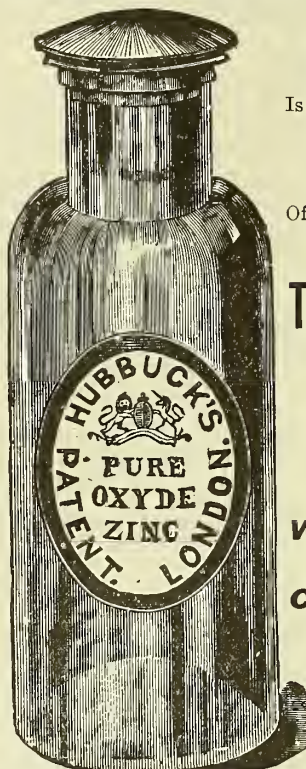
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Price in bulk: 3/6 per lb.
28 lbs., 3/4 } less 5¢
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Artistic Tins for the waistcoat } net.
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These Wafers average 120 to the ounce.

The card box contains about 90 Wafers.

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Aceto-Morphine

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Narcotine

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- *Acet. Ipecac. B.P., 7 lbs. @ 1/5 lb.
- *Scilla, P.B., 7 lbs. @ 3d. lb.
- *Acetone, 6 lbs. @ 1/2 lb.; 1 lb. @ 1/4 lb.
- *Acid. Acet. Glacial, 99%, Carboys, 160 lbs. @ 4½d. lb.; 12 6-lb. bots. @ 6½ lb.; 6 lbs. @ 8d. lb.
- *Acetylo-Salicyl., 56 lbs. @ 2/4 lb.; 7 lbs. @ 2/7 lb.; 1 lb. @ 2/9 lb.
- Benz. B.P., 7 lbs. @ 1/8 lb.; 1 lb. @ 2/10 lb.
- Boric Pulv., 3 cwt. @ 28/- cwt.; 1 cwt. @ 28/6 cwt.; leviged, 3/- cwt. or ¾d. lb. extra.
- Carbol. Xils., 39/40; @ 8d. lb.; 10 lb. Tins @ 7/6 each; 36 1-lb. Bots. @ 10½d. lb.
- Single Bots. 1/6d. each; 1 lb. @ 1/3 lb.; Crude Black, 45 Gall. casks; 1 Gall. tins @ 1/6 each.
- Drums @ 1/4 Gall. each; 1 Gall. tins @ 1/6 each.
- Citric Cryst., B.P., 85, 1 cwt. @ 1/5 lb.; 7 lb. in Bags @ 1/6 lb.; powder ¾d. lb. extra.
- Diethylbarbituric, 16 oz. @ 26/- lb.; 1 oz. @ 2/1 oz.
- Gallie pur. P.B., 7 lbs. @ 1/10 lb.; 1 lb. @ 2/- lb.
- *Hydrobrom., dil. B.P., 6 lbs. @ 6½d. lb.
- Hydrochlor. Coml., cases of 4 2-gal. jars, 17/- each; 20 case lots @ 16/- each.
- *Hydrocyan. P.B., 6 lbs. @ 1/1 lb.; 1 lb. @ 1/4 lb.; 36 1-oz. Vials @ 3/6 doz.
- Oxalic Cryst., 5 cwt. @ 3d. lb.; 1 cwt. @ 3½d. lb.; 14 lbs. @ 3½d. lb.
- *Phosph. Dil., B.P., 7 lbs. @ 4½d. lb.
- Salicyl. pulv., 7 lbs. @ 1/1 lb.; phys pure, 1 lb. @ 3/- lb.
- Sulphur, Coml., cases, 4 2-gal. jars, 17/- each; 20 cases @ 16/- each.
- *Sulph. Aromat., B.P., 5 lbs. @ 3/8 lb.
- Tannic, B.P., 7 lbs. @ 2/2 lb.
- Tart., cryst. or pulv., B.P., 1885, 1 cwt. @ 1/1 lb.; 7 lbs. @ 1/2 lb.; parv. ¾d. lb. extra.
- Adeps Benz., B.P., 28 lbs. @ 7½d. lb.; 7 lbs. @ 8½d. lb.
- Adeps Lanae B.P., Anhydrous, 2 cwt. @ 52/6 cwt.; Hydrous @ 49/- cwt.; 1 cwt. @ 2/- cwt.; 28 lbs. @ 5/- cwt.; 14 lbs. @ 8/- cwt. 7 lbs. @ 12/- cwt. extra.
- Ærugo Æris Pulv., 14 lbs. @ 11d. lb.
- Aloes Barb., English ground, 28 lbs. @ 66/- cwt.; 7 lbs. @ 8d. lb.
- Aloes, Socot., 7 lbs. @ 1/5 lb.; powder, 7 lbs. @ 1/5 lb.
- Aloin, B.P., 1 lb. @ 3/9 lb.
- Ammon, Benz., 7 lbs. @ 2/8 lb.; 1 lb. @ 3/- lb.
- Ammon, Brom., P.B., 1 cwt. @ 1/8½ lb.; 7 lbs. @ 1/10½ lb.
- Ammon. Carb. lump, 3 cwt. @ 3½d. lb.; 28 lbs. @ 4½d. lb.; 7 lbs. @ 5d. lb.; powder, ¾d. lb. extra.
- Ammon. Chlor., 99% pulv., 1 cwt. @ 33/- cwt.; 7 lbs. @ 4d. lb.; Batteries, 4/- cwt. extra.
- Amyll Pulv., 10 cwt. @ 11/9 cwt.; 2½ cwt. @ 12/6 cwt.; 1 cwt. @ 15/- cwt.
- Aniseed, English ground, 1 cwt. @ 41/- cwt.; 7 lbs. @ 5½d. lb.
- Antim. Crocus Pulv., 1 cwt. @ 33/- cwt.; 7 lbs. @ 5d. lb.
- Antim. Nig. Pulv., 1 cwt. @ 25/6 cwt.; 14 lbs. @ 33/- cwt.
- Apiol, 1 lb. @ 13/9 lb.
- *Aqua Anethi Conc, 1-40, 1 lb. @ 2/11 lb.
- *Anisi Conc, 1-40, 1 lb. @ 3/1 lb.
- *Cinnam. Conc, 1-40, 1 lb. @ 3/4 lb.
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- *Laurocerasi, 53 lbs. for 20/-; 6 lbs. @ 7d. lb.
- *Menth. Pip. Conc. 1-40 1 lb. @ 3/- lb.
- *Rosa Trip, 53 lbs. for 20/-; 6 lbs. @ 7d.
- *Rosa Conc. 1-40 1 lb. @ 6/- lb.
- *Aqua Samb. Trip. 53 lbs. for 23/6; 6 lbs. @ 8d. lb.
- *Samb. Conc., 1-40, 1 lb. @ 6/1 lb.
- Araroba, fine powder, 7 lbs. @ 4/ lb.; 1 lb. @ 4/6 lb.
- Argent. Nit., 6's to oz., 25 oz. @ 1/7 oz.; 1 oz. @ 1/10 oz.
- Cryst., 25 oz. @ 1/6 oz.; 8 oz. @ 1/7½ oz.
- Arsenic. Alb. Pluv., 2 cwt. @ 14/- cwt.; 7 lbs. @ 4d. lb.
- Atropinæ Sulph., P.B., 1 oz. @ 11/10 oz.
- Atrophinæ Sulph., P.B., 1 oz. @ 11/10 oz.
- Auri Chlor., 6 doz. 15 gr. tubes @ 18/3 doz.; 1 doz. 15 gr. tubes @ 19/6 doz.
- Bals. Copaiba pure, 44 lbs. @ 2/- lb.; 9 lbs. @ 2/3 lb.; 1 lb. @ 2/6 lb.
- Peruv. P.B., 7 lbs. @ 8/5 lb.; 1 lb. @ 8/11 lb.
- Sulphur, 7 lbs. @ 8d. lb.
- Tolut. B.P., 50 lbs. @ 2/7 lb.; 1 lb. @ 3/- lb.
- Benzo-Naphthol, 7 lbs. @ 2/8 lb.; 1 lb. @ 3/- lb.
- Bismuth, P.C. Carb., 7 lbs. @ 8/10 lb.; 3 lbs. @ 9/1 lb.; 1 lb. @ 9/3 lb., subnit., 1/- lb. less.
- Boracic Mixture, 1 cwt. @ 38/- cwt.
- Borax, 1 cwt. @ 16/9; powder 1/- extra.
- Butyl Chloral Hydras, P.B., 1 lb. @ 8/10 lb.
- Caffeine, P.B., 1 lb. @ 14/- lb.
- Caffeine Cit. B.P., 1 lb. @ 10/- lb.
- Calamina, powder, fine pink, 5 cwt. @ 9/6 cwt.; 1 cwt. @ 10/6 cwt.; 7 lbs. @ 2d. lb.
- Calamine B.P., 1885, 7 lbs. @ 9d. lb.
- Calcii Carb. præcip., 5 cwt. @ 13/- cwt.; 1 cwt. @ 16/- cwt.; 28 lbs. @ 21/- cwt.
- Hydras, P.B., 1 cwt. @ 25/- cwt.; 7 lbs. @ 5d. lb.
- Hypophosph. Pur P.B., 1 lb. @ 2/3 lb.
- Iodid., 1 lb. @ 13/8 lb.
- Camphor, English Flowers, "not artificial," 5 lbs. @ 2/- lb.; ¼ oz. or ½ oz. 7 lbs. @ 2/- lb.; Crude, good white, about 92% as imported, 140 lbs. @ 1/7 lb.; 28 lbs. @ 1/8 lb.
- Cantharides, Russian, 7 lbs. @ 3/9 lb.; powder, 2d. lb. extra.
- Capsicine, soluble, 1 lb. @ 6/6 lb.
- Carbo Animalis or Ligni, powder or lump, 1 cwt. @ 14/- cwt.; 28 lbs. @ 2d. lb.
- Cardamoms, 28 lbs. @ 2/7 lb.; 7 lbs. @ 2/9 lb.
- Carmine, Finest, 1 lb. @ 17/- lb.; No. 2, 1 lb. @ 13/- lb.
- Cera Alba, B.P., White Moons, 1 cwt. @ 1/6½ lb.; 28 lbs. @ 1/7½ lb.; 4 lbs. @ 1/8 lb.; Flav. 1 lb. Blocks, 28 lbs. @ 1/6½ lb.; 4 lbs. @ 1/7½ lb.; 1 oz., ½ oz. Tabs., 7 lbs. @ 1/7½ lb.
- Cerii Oxalas, 7 lbs. @ 1/2 lb.
- Cetaceum No. 1, fine white English, 64 lbs. @ 1/2½ lb.; 7 lbs. @ 1/4 lb.; powder, 7 lbs. @ 1/9 lb.
- Chloral Hydras Cryst. B.P., 7 lbs. @ 3/1 lb.; 1 lb. @ 3/6 lb.
- *Chlorodyne, 5 lbs. @ 1/11 lb.
- *Chloroform, pure B.P., 12 8-lbs. @ 1/3½ lb.; 8 lbs. @ 1/4½ lb.; 6 1-lb. bots. @ 1/6½ lb.
- Chlorophyll, 7 lbs. @ 5/- lb.; 1 lb. @ 5/9 lb.
- Cocaine Hydrochlor., B.P., 25 ozs. @ 8/6 oz.; 4 ozs. @ 9/- oz.; 1 oz. @ 9/5 oz.
- Codeina, 1 oz. @ 18/5 oz.; Phosph., 1 oz. @ 16/9 oz.; Hydrochlor or Sulph., 1 oz. @ 17/7 oz.
- Colocynth, Apple, English ground, 1 cwt. @ 10½d. lb.; 28 lbs. @ 11d. lb.; 7 lbs. @ 1/0½ lb.
- Composition Powder (Coffin's), 1 cwt. @ 58/- cwt.; 7 lbs. @ 7½d. lb.
- Conf. Sennæ, P.B., 14 lbs. @ 8d. lb.; 7 lbs. @ 8½d. lb.
- Cort. Aurant. Exot. Shreds, 1 cwt. @ 10½d. lb.; 7 lbs. @ 1/- lb.
- Cinchon. Rub. (Quill), 7 lbs. @ 1/- lb.
- Cort. Ulmi Fulvæ, 1 cwt. @ 8½d. lb.; 7 lbs. @ 10d. lb.
- Cream Tartar, 98% powder, 1 cwt. @ 93/- cwt.; 7 lbs. @ 11d. lb.
- Creasote, Beechwood, P.B., 22 lbs. @ 1/9½ lb.; 7 lbs. @ 1/11½ lb.
- Creta c. Camph., 7 lbs. @ 8d. lb.
- Gall. Pulv. in sacks, 10 cwt. @ 6/9 cwt.; 1 cwt. @ 8/3 cwt.; 14 lbs. @ 1½d. lb.
- Creta Preparata, 7 lbs. in box, 9d. each.
- Cubebæ, English Ground, 28 lbs. @ 2/1 lb.; 7 lbs. @ 2/3 lb.
- *Dec Aloes Co. Conc. 1-2, 6 lbs. @ 2/9 lb. Sine-croco, 6 lbs. @ 1/2 lb.
- *Dec Cinchonæ (Rubræ) Conc. 1-7, 6 lbs. @ 1/10 lb.
- *Dec Senegæ Conc., 6 lbs. @ 2/1 lb.
- Dionine, 15 grains @ 1/8; ½ oz. @ 9/-.
- Emp. Spread 12 yds × 16 ins. Adhesive, 3/8' Ballad. B.P.C., Green @ 16/6; Cerat. Saponis @ 7/6; Picis Co. @ 7/6; Plumb. 6/-; Resin, @ 4/6; Roborans @ 6/-; Saponis B.P. @ 6/-.
- Emp. Picis, P.B., 7 lbs. @ 8½d. lb.
- Plumbi, P.B., 7 lbs. @ 8½d. lb.
- Resinæ, P.B., 7 lbs. @ 8½d. lb.
- Roborans, 7 lbs. @ 8½d. lb.
- Emulsio Ol. Morrhuæ, 10 lbs. @ 9d. lb.
- Eserine Sulph. in 15 grain tubes, 5/3 each.
- Ess. Bergain. (Oil), 12 lbs. @ 9/- lb.; 1 lb. @ 20/- lb., not guaranteed absolutely pure.
- Ess. Limonis (oil) original coppers, 14 lbs. @ 4/6 lb.; 6 1-lb. bots. @ 4/9 lb.; not guaranteed absolutely pure.
- *Ess. Moschi (not artificial), 5 lbs. @ 10/3 lb.; 1 lb. @ 11/3 lb.
- *Ess. Pear (artificial), Jargonelle, 5 lbs. @ 1/6 lb.; Bergamot, 2/6 lb.
- *Pineapple, 5 lbs. @ 3/4 lb.
- *Raspberry, 5 lbs. @ 2/2 lb.; 1 lb. @ 2/6 lb.
- *Vanilla Beans, 5 lbs. @ 4/4 lb.; 1 lb. @ 4/7 lb.
- *Ext. Belladonnæ Liq., B.P., 5 lbs. @ 4/3 lb.; 1 lb. @ 4/8 lb.; solid, 7 lbs. @ 2/10 lb.
- Ext. Cannab. Ind. Alc., B.P., 5 lbs. @ 38/6 lb.; 1 lb. @ 39/6 lb.
- Ext. Cascara Sag. Liq., B.P., 1 cwt. @ 1/0½ lb.; 10 lbs. @ 1/2 lb.
- *Ext. Ergot. Liq., P.B., 5 lbs. @ 7/3 lb.; 1 lb. @ 7/9 lb.; Solid, P.B., 4 lbs. @ 37/6 lb.; 1 lb. @ 38/6 lb.
- Ext. Filicis Liq., P.B., 9 lbs. @ 4/10 lb.; 1 lb. @ 5/1 lb.
- Ext. Gent., P.B. Solid, 1 cwt. @ 9½d. lb.; 7 lbs. @ 10½d. lb.
- *Ext. Glycyrrh. Liq. B.P., 6 lbs. @ 1/4½ lb.
- *Hamamelis, Liq., P.B., 5 lbs. @ 3/5 lb.
- Ext. Hyoscyam., Solid, B.P., 3 lbs. @ 4/9 lb.; 1 lb. @ 5/1 lb.
- *Ext. Ipecac. Liq., P.B., 5 lbs. @ 14/2 lb.; 1 lb. @ 15/2 lb.
- Ext. Malti c. Ol. Jecoris, 10 lbs. @ 5½d. lb.
- *Ext. Nucis Vom. Liq., P.B., 5 lbs. @ 3/- lb.; 1 lb. @ 3/3 lb.; solid, 5 lbs. @ 2/9 lb.; 1 lb. @ 3/- lb.
- Ext. Opil Solid, P.B., 1 lb. @ 52/6 lb.
- *Ext. Opil Liq. B.P., 5 lbs. @ 4/5 lb.; 1 lb. @ 4/8 lb.
- Ext. Quassia, Solid, 7 lbs. @ 6/- lb.; 1 lb. @ 6/4 lb.
- Ext. Sarsæ Co. Solid, 7 lbs. @ 4/- lb.; 1 lb. @ 4/6 lb.
- Ferri Ammon. Cit., P.B., 28 lbs. @ 1/5 lb.; 7 lbs. @ 1/7½ lb.
- Ferri Carb., 1 cwt. @ 21/- cwt.; 28 lbs. @ 3d. lb.
- Ferri et Quinina Cit., P.B., 500 ozs. @ 3d. oz.; 100 ozs. @ 3½d. oz.; 25 ozs. @ 2½d. oz.
- Ferri Sulph., pure cryst., 1 cwt. @ 15/-; 7 lbs. @ 3d. lb.
- Ferrum Redact., 80%, 28 lbs. @ 1/1 lb.; 7 lbs. @ 1/3 lb.
- Flor. Anth. Exot, 1 cwt. @ 125/-; 7 lbs. @ 1/3 lb.
- Fol. Buchu, exot, good green, 7 lbs. @ 2/6 lb.
- Fol. Hyoscyam, Bien., 7 lbs. @ 5/6 lb.; pulv., 5/3 lb.
- Fol. Sennæ Alex. parv., 28 lbs. @ 4½d. lb.

*Minimum quantity at these prices: Home Trade, 8 Winchester Quarts assorted; Export, 12 Winchester Quarts assorted.

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For Chronic Cough, Broken Wind, Roaring, &c.

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In Tins 3/- and 6/- each.

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A successful modification of the Veterinary Preparation. In Pots, 2/- each.

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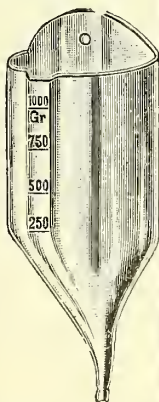
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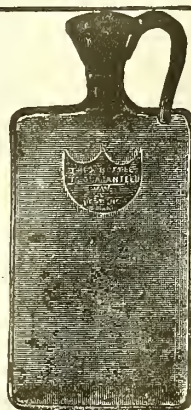
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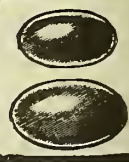
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REDUCTION IN PRICES

GUARANTEED FOR 2 YEARS.

"THE EMPIRE BRAND."

Both heavy and light Bottles are made from **best quality rubber**.



FIG. 957.—Side Handle.

	Sizes	6 × 8	6 × 10	6 × 12	8 × 10	8 × 12	8 × 14	10 × 12	10 × 14	12 × 14
Top or side handle										
Heavy make ... each		3 0	3 4	3 9	4 0	4 4	4 9	5 0	5 4	6 6
Light		2 9	3 0	3 5	3 6	3 10	4 6	4 8	5 0	6 1
Covers, scarlet or grey plush, each		0 3	0 8	0 10	0 10	0 11	0 11	0 11	1 0	1 2
" " " felt "		0 5	0 5	0 6	0 6	0 7	0 7	0 8	0 10	1 0

N.B.—The metal collar in both heavy and light Bottles is **vulcanized into the rubber neck**, thus making it practically one solid piece and doing away with all possibility of leakage.

For orders of **two dozen** bottles assorted we will put tablet with customer's name on free of charge.

Each Bottle in a strong paper bag with directions for using.

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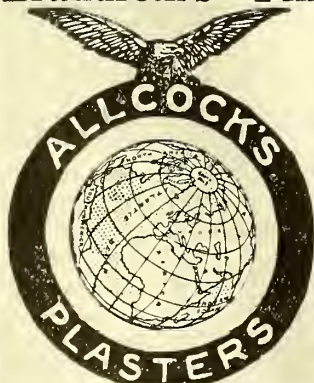
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Reliables.



A HANDSOME
SHOWCARD
will be sent
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MANUFACTURING
COMPANY

22 Hamilton Sq.,
Birkenhead.

"Sold all round the World."

BAILEY'S HOT WATER BOTTLES.

VERY BEST RUBBER at lowest Prices.



Fig. 1.

Size.	Fig. 1 or Fig. 2 s. d.
10 × 6	- 4 1
12 × 6	- 4 7
10 × 8	- 5 2
12 × 8	- 6 0
14 × 8	- 6 3
12 × 10	- 6 8
14 × 10	- 7 6
16 × 10	- 8 2



Fig. 2.

W. H. BAILEY & SON,

38 OXFORD STREET, LONDON, W.

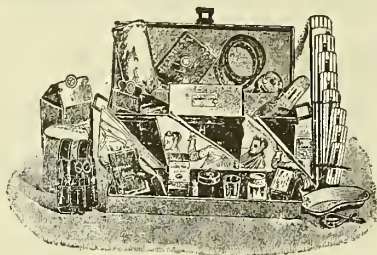


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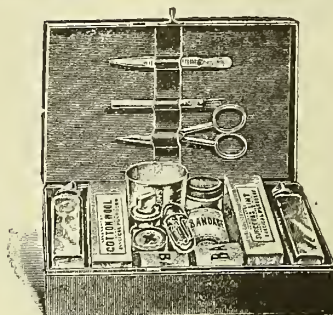
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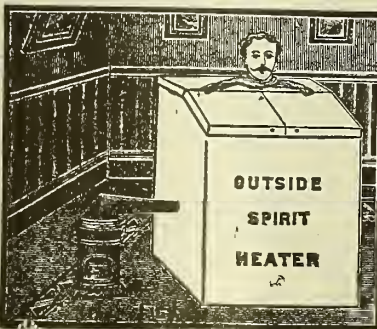
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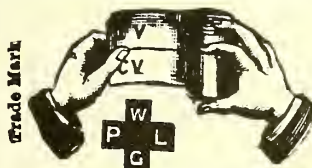
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AN ELASTIC BANDAGE.
Containing no Indiarubber.
Superseding Elastic Stockings,
Webbs, Bandages, and at half the
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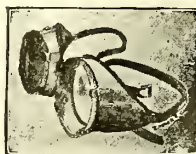
Useful after many Abdominal Operations, and for ladies after
confinements. Two sizes—8 and 11 in. wide.

CAUTION.—Beware of fraudulent and useless imitations, and reject
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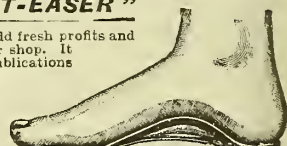
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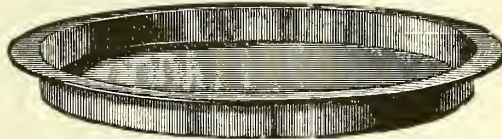
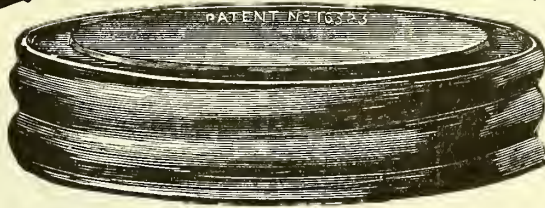
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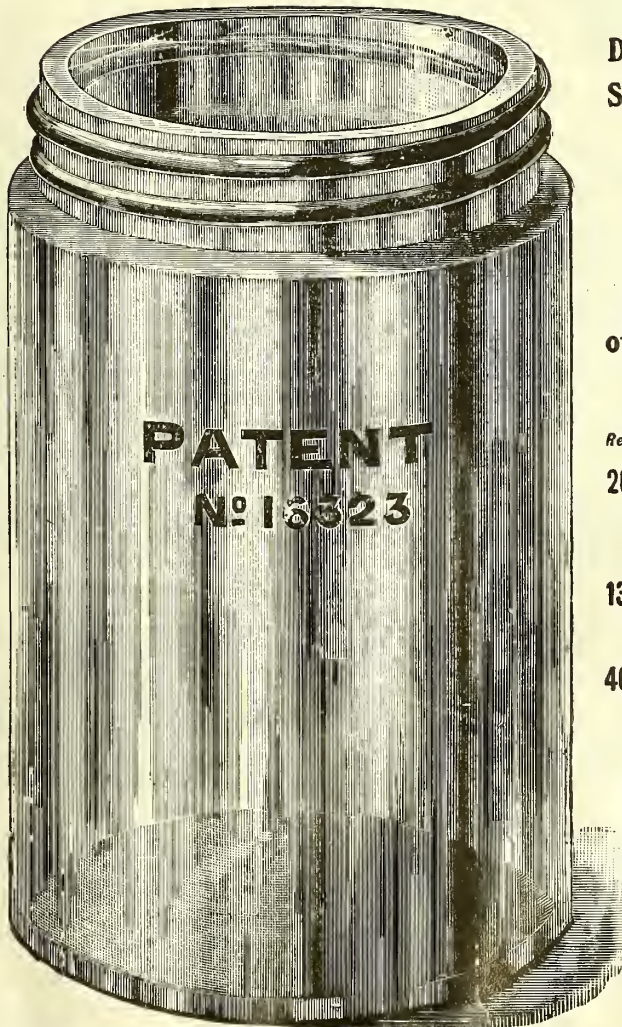
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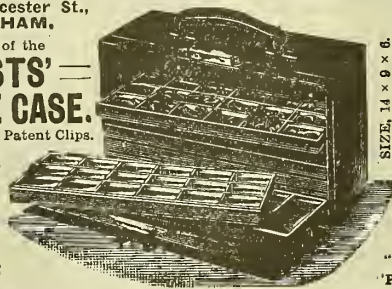
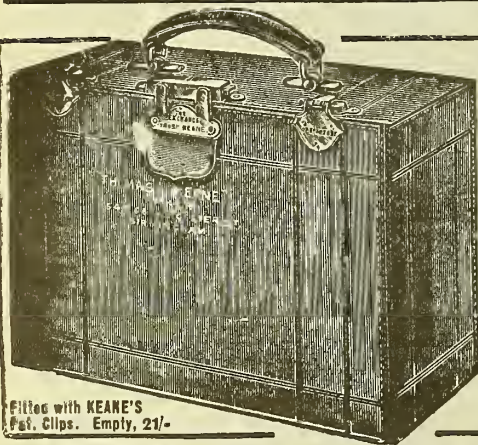
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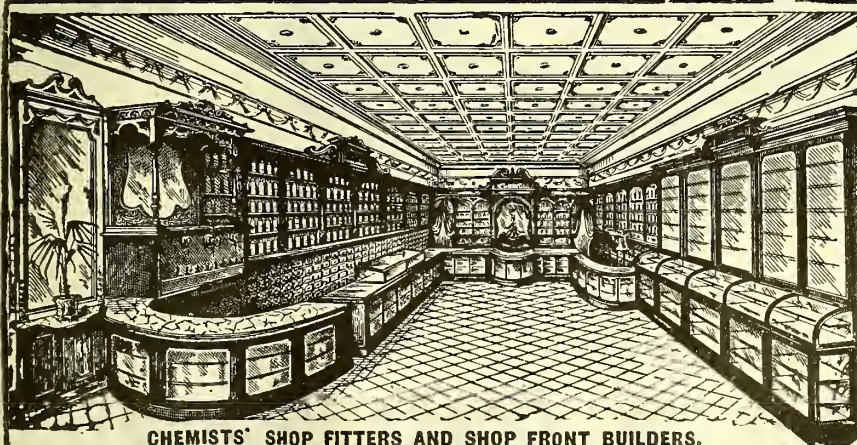
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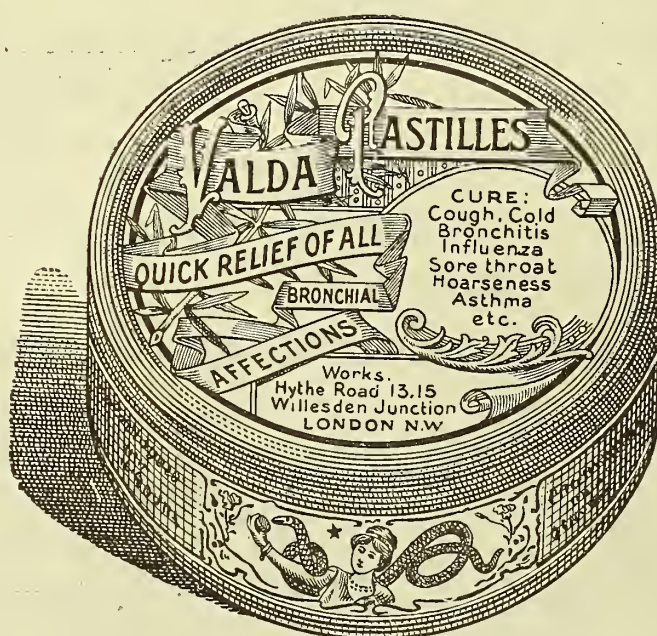


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